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SCIENTIFIC METHOD IN AESTHETICS

THOMAS MUNRO

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Scientific Method in Æsthetics

AN OUTLINE OF ÆSTHETICS

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THE MIRROR OF THE PASSING WORLD

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SCIENTIFIC METHOD IN ÆSTHETICS

Thomas Munro (Psychology and Æsthetics)

Scientific Method in Æsthetics

By

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PREFACE

INSTEAD of trying to cover a small field thoroughly, this book touches briefly on a considerable variety of æsthetic, critical and educational problems. Its aim is to suggest in regard to each the implications of an experimental attitude; to indicate the bearing of recent developments in philosophy and psychology; and to show how all of these problems could be dealt with in a comprehensive program of research.

The book owes its philosophical viewpoint largely to the writings of John Dewey and George Santayana: to the former for his conception of experimental method, of valuation and of æsthetic experience; to the latter for his conception of the place of art in the life of reason, and of æsthetics in a naturalistic philosophy. In the field of art criticism, it is much indebted to Dr. A. C. Barnes for his conception of plastic form, and for his analyses and historical studies of form in painting. It is a pleasure to express thanks for these invaluable suggestions. At the same time, it may be well to add the usual caution, that the writers named are not to be held responsible for views which may not coincide with their own, and that the present book is not advanced as representing their opinions or methods.

The method presented is the outgrowth of museum lectures and discussion groups conducted by the author, at or under the auspices of Columbia, Pennsylvania, New York and Rutgers Universities, The Barnes Foundation, The Metropolitan Museum of Art and The People's Institute. To all of these thanks are extended for many opportunities and courtesies.

THOMAS MUNRO

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CONTENTS

PAGE

PREFACE v

INTRODUCTION ix

CHAPTER

I. EXPERIMENTAL ÆSTHETICS 13

The present situation in æsthetics—The experimental attitude in science—Observation—Art criticism as an approach to æsthetics—Its tendencies toward science—"Experimental æsthetics" broadly conceived.

II. THE ANALYSIS OF FORM 30

A descriptive attitude in criticism—Organic perception of a complex form—Tentative criticism—Comparison of forms and of media—Form-types—Redefinition of terms—Histories of form—Questionnaires for analysis—Comparison of findings.

III. ÆSTHETIC PSYCHOLOGY 60

Its task in general—Suggestions from laboratory psychology—From genetic and comparative psychology—From educational psychology—From psychoanalysis—From behaviorism—The production of art—Education for creativeness—Appreciation—Words as data for psychology.

IV. VALUATION AND VALUE-STANDARDS . . . 81

The need of descriptive study—Enjoying and criticizing—Analyzing an æsthetic situation—predicting future æsthetic values—Non-æsthetic values of art—Revising social standards—Control and æsthetic experience.

NOTES 99

INTRODUCTION

THE title of this book is certain to send cold shivers up and down the straight and rigid backs of a considerable number of critics, connoisseurs and learned interpreters of high æsthetic doctrine. For while the more robust type of æsthetics has not shrunk from rigorous philosophic analysis, it has in general held itself haughtily aloof from too practical application to the motley class of *objets d'art*. Following the precedent of pure mathematics, æsthetics has preferred to exist as a theoretic discipline cultivated in its own right for speculative and rational ends alone. If æsthetic writers contrived to rear structures of intellectual beauty and consistency, no objections were offered to the premises on which these fairy castles rested, nor were their systems subjected to disintegrating use in the attempt to explain æsthetic experience. Æsthetics was cultivated as an austere art of the creative reason.

In its alliances with philosophy, æsthetics has usually sided with the type of thought which stresses the rational imagination rather than the thought which has been concerned with imposing laws on a chaotic and resisting world. From the vantage point of snowy metaphysical heights, æsthetics has looked down on science with some mistrust. It has watched it topple over the fair statues of the gods which were the supreme creation of ancient art. It has observed how it transformed philosophy from logical adventure to prosy positivism, from roving freely over the entire cosmos to the meticulous study of method. It has seen the calloused hands of laboratory mechanics take the mind to pieces bit by bit and describe the radiance of the soul as a bio-chemical formula. That any attempt should be made to introduce scientific method into æsthetics has seemed the height of barbarism.

There has been a tendency both among scientists and writers

to think of science as one particular technique or as a single standard pattern of thought. No conception can be further from the facts. There are as many sciences as there are fields explored by the human mind, and each has its own methods of procedure. Nor has science any particular or restricted subject matter such as nature or tangible things. Science is a systematic and candid way of examining and interpreting the facts of experience. As such its ways of going to work will be suited to the particular problems involved.

Science might be described as a humanistic way of looking at experience. It is humanistic because it seeks to understand all things rationally, which is to say in human terms. It is humanistic because it relies on the joint testimony of human kind, not on individual adventures or private revelations. It is humanistic because it seeks to promote the interests of the race through conscious control and foresight. If it is impersonal, it is also just. If it seems destructive of spiritual values, it has saved unnumbered human lives and immensely augmented the worth of life. Art is the human way of creating experience, and science is the human way of understanding it. Between the two there can be no antagonism.

The great interest of Dr. Munro's book lies in the fact that it describes an embryo science of æsthetics which has hardly yet been born. Here we can watch the scientific mind impartially approaching a new material and making its first tentative experiments. No exact methods have yet been developed for analyzing art, though certain ones hold out considerable promise. One enters the art laboratory to witness the birth of a new science which will be contemporary with our lifetime, not an aged and learned discipline inherited from the past. Nor can any one say whether this child will live. The problems before it are in many respects more elusive than any that have yet been undertaken. For in studying art, man is seeking to know himself through the mirror of his own mind.

What science will be able to accomplish for æsthetics is difficult to estimate from its very tentative beginnings. Already one notes, however, a grateful attempt to eliminate the vagaries of æsthetic verbiage through a careful reëxamina-

tion of meanings. One welcomes also, a disposition to hear all schools and shades of æsthetic opinion without partisanship. Those that have contributions to make are certain of ready approval. And lastly one observes with satisfaction that the scientist goes directly to art and the experience of art for his data. Æsthetics, so far as he is able to contribute to it, is to be applied æsthetics. It is to be based on experimentation with art; not on speculation, or books, or history, or even on personal emotion.

One result which may be confidently predicted from the introduction of scientific method into æsthetics is a keener interest in seeing art of all kinds. Surely a science with such inviting data will enlist many investigators. A scientific spirit toward art, though it may seem a little impersonal at first, will be a welcome relief from the turgid emotions and unstable sensibilities that still characterize public behavior in the presence of art. Artists and students of art will discover that scientific method in æsthetics is but another name for sanity and fresh observation in the approach to art.

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SCIENTIFIC METHOD IN AESTHETICS

CHAPTER I

EXPERIMENTAL ÆSTHETICS

The Present Situation in Æsthetics

In spite of many attempts to turn it into a science, æsthetics is still a branch of speculative philosophy. Among all the branches of philosophy, it is probably the least influential and the least animated, although its subject-matter—the arts and the types of experience related to them—is quite the opposite.

The general reason is not hard to find. As usually written about, and taught in colleges, æsthetics is highly abstract and conceptual, having little close contact with the works of art and the experiences of which it speaks. At the same time its discussions lack that sense of cogency, of penetrating deeply into some realm of tested and organized knowledge, which makes many abstract subjects interesting. A person of scientific temper, in reading a book on æsthetics, is apt to be disappointed by its vagueness, its lack of systematic procedure. One interested rather in art, who hopes for some light on its puzzling questions of value, is apt to emerge with the feeling that he is still miles away from the problems he started with, and is not much the wiser for long erudite theorizing over "The Meaning of Beauty," "The Creative Impulse" and "The Function of Art in Life."

Many recent works in æsthetics have come a little nearer to reality in giving up the old quest for absolute laws of beauty, to be proven logically by deduction from metaphysics. The failure of all attempts at such proof, and the spread of the general world-view based on natural science, have led modern writers to be sceptical about all alleged absolute standards of value in art. Æsthetics has been coming, therefore, to lose its metaphysical character, and to turn

into a highly abstract sort of art criticism. A modern textbook on the subject usually makes no claim to finality, but simply recounts a few of the chief conflicting theories and tendencies in the various arts, along with some recent ideas about the psychology of æsthetic experience.

There is much in these theories that is sensible and suggestive, and evidently derived from a sympathetic understanding of art. But there is nothing in current æsthetics resembling a constructive method for future investigation. Each writer summarizes the views of others, adds his own credo to the rest, and the subject is once more at a standstill. There is little suggestion that æsthetics is a subject capable of organized growth, or of continuous research along any particular lines. Its old rationalistic methodology is no longer able to function in a world pervaded by philosophies of relativism and evolution, and there is none to take its place.

Yet any proposal to apply the methods of natural science in æsthetics is apt to be met with scepticism and indifference. The reply is sure to be forthcoming that its problems are beyond the reach of scientific investigation: that value in art is largely a subjective affair, and hence not susceptible to objective generalization; that æsthetic feelings are too subtle and indescribable to be analyzed in scientific terminology, too diverse and unpredictable to be formulated in universal laws. If they are to be rationally grasped at all, it can be only through a philosophic imagination which is itself a kind of poetry.

With more positive antagonism, some writers would add that science has gone far enough in reducing our world to laws and classifications, and in providing standardized, mechanical ways of controlling it. If any realm of experience is yet stubbornly mysterious, uncharted, open to ungovernable dreams and impulses, let it remain so as a place of escape from the omnivorous machine. Gray is all theory, and all charms fly at its touch. If science must mechanize and deaden what it penetrates, let us be in no hurry to extend it to the arts, and to the spontaneous enjoyments of life.

These objections are to a large extent justified by the narrow conception of the aims and methods of science entertained by some of its followers. In particular, they are justified by the disappointing results of all the attempts that

have been made at applying scientific method to æsthetics.

At least as long ago as 1876, when the work of Fechner appeared, there was talk of a science of æsthetics which should proceed by observation and induction, rising to generalizations "from below," instead of working downward by deduction from metaphysics. Since then there have been frequent efforts to investigate æsthetic preference by controlled experiments, usually with numerical treatment of the results.[1] But, as adverse critics never tire of pointing out, the resulting generalizations have been not only dubious but trivial. The whole procedure has never touched the central problems of artistic value, and gives no promise of ever coming into contact with the most important elements in æsthetic experience.

The esssential weakness in this "experimental æsthetics," as it has been called, is that it has never been broadly and thoroughly experimental, and hence that it has never been fairly representative of modern scientific method. The performing of set experiments without number is no guarantee of that method, which consists in a habit of mind rather than in any special technique. A genuinely experimental approach to æsthetics as a whole has never been tried, and its possibilities of success or failure, good or evil, are therefore unknown.

The Experimental Attitude in Science

Scientific method is by no means identical with the use of X-rays, color-charts, galvanometers or any of the other paraphernalia of particular sciences. It is not identical with absolute logical proof, or the working out of chains of "necessary" inferences, like those of geometry. It is not identical with quantitative measurements. Their utility in most scientific fields is of course undeniable, and the extent to which they are developed is often regarded as the chief criterion of a science's progress. Nevertheless, in dealing with complex and variable phenomena, such as are constantly met with in biology, psychology and the social sciences, they are often impossible, and investigation must proceed, if at all, in more rough and approximate terms. When erected into a fetish, as they have been by "experimental æsthetics," they usually lead to premature inferences that have a specious air of cer-

tainty, and to the neglecting of more fruitful modes of inquiry.

The basic way of thinking that has led to progress in natural science has become a little clearer in the last few years through the study of logical methods in relation to the psychology of reasoning. It consists, essentially, in observing concrete phenomena, comparing them so as to find their resemblances and differences, forming hypotheses to explain their causes and regular recurrences, and testing these hypotheses by more observation of or experiment with concrete facts. To some extent, this process occurs whenever we think intelligently about our daily problems. It is not called "scientific," however, except when done with a considerable degree of care and system. To increase its reliability, logicians have worked out formal methods of induction and deduction, which are still being refined along the lines of statistical correlation and symbolic logic.

Even with these guides to accuracy, scientific thinking is constantly endangered by the tendency of human beings to adopt fixed ideas and habits of mind, which lead them to ignore or misinterpret actually observable phenomena. This risk cannot be avoided. Every attempt to organize the infinite variety of experience into definite categories entails the necessary omission of certain qualities which seem less significant at the time. But if we keep on ignoring them, ceasing to observe or forcing all new data into preconceived moulds, our thinking will grow more and more artificial, false and useless.

The only remedy for science, in its quest for a faithful and thorough account of nature, is to keep going back to the concrete facts as directly experienced, and to keep trying to see them afresh, with a watchful eye to neglected aspects. Its theories, its definitions of terms, and its special modes of research must then be revised and broadened to fit this broader acquaintance with its subject-matter.

Only a method persistently tentative and open-minded deserves the title "experimental," and any attempt to extend scientific method to æsthetics should be made with a constant realization of this fact. Success can never come through a simple transfer of the special procedures and terminology of the older sciences. It is not to be achieved merely

by applying a formal logic which has worked well in geometry, or through special laboratory devices which are suitable to the study of simpler phenomena. No amount of speculation in psychological, physiological or sociological terms can be more than suggestive, when its aim is merely to "reduce" æsthetic phenomena to concepts derived from other fields. Advancing to a more complex and subtle realm of phenomena, the method of science must itself become more flexible, giving rise to new appropriate modes of research and expression. The advance can be made, if at all, only through fresh and extensive observation of æsthetic phenomena, with a persistent effort not to ignore their peculiarities. Previously formed theories will be of service as hypotheses, but must always be regarded with suspicion.

Another implication of an experimental attitude in æsthetics will be a willingness to make the best of the materials at hand, as to both data and hypotheses. Too rigorous an insistence on absolute reliability and "objectivity" of data, too impatient a zeal for universally valid generalizations, may be an obstacle in a field where these cannot be attained at once, if ever. As far as objectivity is concerned, we are gradually learning that no science, even mathematics, can be too sure of itself. Since the seventeenth century, one attack after another has weakened the claim of science to describe the world as it is in itself. Scientists are finally coming to recognize their own human limitations: to admit that all their observing and thinking is done, after all, by organisms with a certain limited structure; that most if not all of their principles contain a large admixture of contingency and useful fiction. Their main effort is devoted now to making generalizations that will work as reliably as possible in predicting and controlling events. "Objectivity" then comes to signify a relative and practical measure, of how far a belief has ceased to be merely individual and ephemeral, and has grown to represent the tested experience of humanity. There is no sharp line between "laws" which possess this quality and "theories" which do not, but a gradual difference in degree. There is no field of discussion, including æsthetics, in which the reliability of theories can not be gradually increased through systematic testing and revising in the light of new experience.

It is wise to maintain, on the whole, a fairly rigorous ideal of science, to distinguish it from the many less dependable kinds of thinking that masquerade in its garments. But a too sharp distinction between what is science and what is not may do more harm than good. It may lead, on one hand, to a too persistent search for exactness where it can not be attained. On the other hand, the only alternative may seem to be a total abandonment of the field to vague speculation and sentiment. The complacent assurance that all science is impossible in æsthetics has provided many a writer with an excuse for careless thinking. Thus æsthetics ignores the opportunity of a middle course, in which it could strive for as much systematic control of its observing and thinking as the nature of the phenomena would permit. Demanding positive knowledge or none at all, rejecting all data that are not rigorously objective from the start, it overlooks potentially significant phenomena, and fails to develop the probability of its theories.

Observation

Even after two generations of disappointing effort, Fechner's theory that æsthetics should be based on observation still sounds like a reasonable starting-point. But the crucial next step is to say what shall be observed, and in what way.

The Fechner tradition in æsthetics, it was noted above, has usually limited itself to observing those features of art and æsthetic experience which can be described with high objective accuracy, such as dimensions and votes of preference. This automatically excludes the facts of greatest concern to artists and critics: the subtle and complex ways in which a work of art affects a sensitive observer.

Suppose, for example, that we go before a painting with a firm resolution to be dispassionate, and to set down only facts which can not be disputed. We record its dimensions, the number of figures in it, the colors as compared with a standard color-chart, the geometrical form of the intersecting straight lines and curves. This, we say, is a description of the picture. But an artist or critic, if he reads it, will probably remark, "You have left out the picture's most important qualities: its gracefulness of line and richness of color." Another may say, "You have left out its most im-

portant qualities: its garish colors and crudeness of drawing." Disagreeing widely on what the important qualities are, they will unite in saying that the "scientific" description has left them out.

At this point, the scientist with a rigid conception of objectivity feels himself in deep and muddy water. These "qualities" of which the critics talk, he will insist, are not really in the picture at all; they are subjective, emotional responses of the critics themselves. They are what Santayana has called the "tertiary qualities" of things: like the "dreariness" of a rainy day, or the "majesty" of an old oak, they have no place in a scientific description of the object. Far from being inherent in the object itself, they are not even "secondary," like redness and warmness, qualities which anyone with ordinary sense-organs can experience. They are expressions of feeling and valuation, peculiar to each individual, projected unconsciously upon the picture, and mistakenly believed to be properties inherent in it.

Suppose that we transfer our attention from the picture to the mind of the person who beholds it, and try to observe what goes on there. The prospect is no less discouraging. For the feelings in question are not to be seen by an outside observer; facial expressions and gestures are a poor clew to them. By introspection they may be observed, perhaps, but describing one's own thoughts and feelings is a notoriously unreliable process, and has certainly failed so far to give adequate data for founding a science of æsthetics.

The consensus of present opinion, therefore, would probably be that scientific observation in æsthetics is impossible. A rigorously objective scrutiny of phenomena is possible only on the outer fringe of æsthetic experience, and could not provide the basis for a comprehensive science. Criticism would not qualify as observation, in a strict sense, because it is too subjective, emotional, biased and unverifiable.

Art Criticism as an Approach to Æsthetics

Both of the chief past approaches to general æsthetics have deliberately held themselves aloof from the criticism of art. The Fechner quantitative approach has done so for the reason just mentioned; the metaphysical approach because of its heritage from the philosophy of idealism: a contempt for

all material embodiments, and a belief that fundamental problems can be solved only on the plane of abstract ideas, without the need of observing concrete particulars. Both are attempts to explain æsthetic experience with methods and concepts remote from that experience itself: in the one case with those of exact science; in the other with those of metaphysics.

Art criticism, on the other hand, is a process that has arisen spontaneously out of the efforts of past generations to think intelligently about particular works of art; its terms and methods are in much closer touch with practical affairs. Not always, but in many cases, it has been the product of direct and varied contact between works of art and sensitive, discerning minds. It often presents the results of that contact in a confused and perplexing form, with an admixture of questionable elements. But it may nevertheless contain data of possible significance to æsthetics, which require only to be selected from their context and properly interpreted.

Granting that its "observations" of works of art are mixed with personal feelings, it should be remembered that these feelings are themselves important to æsthetics. The latter is not interested in works of art "in themselves," or as collections of physical atoms, but in the ways they affect human beings. It is not concerned, as psychology is, with perception and emotion in general, but especially with perception and emotion as related to works of art. Criticism is the nearest approach we have to a recording of particular interactions between works of art and responsive minds.

From this standpoint, all the characteristics of criticism which disqualify it as observation are themselves important as data to be explained. The blending of perception and emotion; of impulse, logic and dogmatism; the usual lack of systematic method; the clash of standards and the disagreement of critics, are all facts which æsthetics can observe, and try to interpret.

As to objectivity, it may at least be possible to distinguish to some extent those elements in criticism which record direct sense-perception from those which express emotional responses and value-judgments. For example, when a critic tells us that a picture is red and blue, with a straight line

here and a curved line there, he seems to be recording experiences which could be shared by almost any one with ordinary sense-organs. When he tells us that it is unified, rich, graceful and animated, he seems to be recording more complex responses. What factors in the picture, and what in his own nature and training, have determined these responses?

If other critics disagree, are there any accompanying differences in character and training which suggest an explanation? When a certain standard of value is accepted by one group of critics, and rejected by others, are there environmental or other associated factors that throw light upon the disagreement?

Such an approach to æsthetics would try to work through the process of criticism to something more general [2] and in a sense more objective: to a study of recurrences and variations in human behavior toward works of art. The first task of the æsthetician, then, would be to familiarize himself with art criticism in all its details, noting the specific issues that arise there, the conflicting attitudes taken and the words in which these attitudes are communicated. He could then proceed to look for underlying explanations and more effective ways of settling whatever conflicts can and ought to be settled; for ways of developing and articulating the structure of ideas for which practical criticism had laid the foundation.

Its Tendencies Toward Science

As a whole, art criticism has no one constant aim or method. It varies now toward dispassionate analysis of its objects, and now toward becoming an independent structure of thought or fancy, in which the critic emphasizes his personal feelings, his virtuosity with words, his power to satirize or glorify, or to entertain with gossip of more or less tenuous relevancy.

As a rule, a critic would feel it tiresome to go into any meticulous analysis of a form, or of his responses to it; few readers would follow him. He jumps at once to the critical terms that characterize the whole object, *as it affects him*: its "suavity," its "terseness" or its "artificial cleverness." He is sometimes lyrical and sometimes dogmatic, scornful of any

one who does not see the thing at once as he sees it, impatient if asked to back up his epithets with demonstrated reasons. To try to dissociate the object clearly from his feelings and analyze either systematically would require an amount of detachment and of scientific patience which he usually does not possess. To try to justify his verdict with reasoned and general standards of value would require a philosophical breadth which is not common in criticism. Yet he is interested enough in rational explanation not to leave the object entirely and launch upon an independent literary composition of his own. Thus he remains at the parting of many ways, by turns veering toward poetry, toward the analysis of form, toward psychology and toward ethics, often without realizing the continuous roads that stretch farther in all these directions.

In the present generation of criticism there have been two movements in the direction of greater objectivity of thinking. One of these is toward psychology, and the other toward the analysis of form. They are influenced by outside knowledge, but are growing chiefly out of the materials of art and the language of criticism. The hope of any future science of æsthetics lies to a large extent in carrying them farther, though perhaps not along the exact lines that their present advocates emphasize.

The tendency of criticism toward psychology begins whenever the critic turns his attention from a work of art to wonder about his own feeling or that of others toward it; or about the motivation, character and methods of the artist who produced it. There have always been sporadic moves along this line of speculation, but it has received a fresh impetus from the modern genetic approach which is being carried into every field of thought. In history, philosophy and the social sciences especially, the nature of ideas and customs is being explained by tracing their origins in man's physical structure and changing social environment. The approach to art in these terms is at least as old as Spencer, Taine and Guyau, but it is still in an unsystematic stage. In its widest implications, it means that every work of art and every response of people to it is a problem for genetic explanation. Why is the work of art as it is, and why does a certain person like or dislike it?—the expected answer being in terms of the artist's

or critic's personality, the psychic and environmental mechanisms which determined his product or judgment.

The fascinating plausibility of the genetic approach has led to a wave of psychologizing in criticism, a great deal of it based on the special theories of psychoanalysis. It runs to wild lengths in trying to explain every work of art in up-to-date psychological terms, while often forgetting that the specific identity, form and value of the work may not be thereby explained or appreciated. But if intelligently pursued, it can be infinitely fruitful in explaining the processes of creation and appreciation, and the reasons why things are good or bad. In criticism it has tended on the whole to produce a more experimental attitude, a realization on the part of critics that they are speaking for themselves and not for the universe.

The tendency toward a study of form has in some cases expressed itself as a direct reaction against the genetic and psychological approaches.[3] It has been coupled with an equally excessive denial that psychology has anything to do with æsthetics, and with a misguided attempt to revive the old absolutistic belief in fixed principles of good art independent of human nature. But in the work of a few critics, the analysis of form has gone along with a sensible use of psychology, and each viewpoint has aided the other.

The constructive work of this movement has been a more discerning and catholic attitude toward the immense variety of ways of organizing the materials of art. In regard to literature, this has meant a decline in reverence for the set patterns and rules of classical rhetoric, with an increasing sensitivity to unconventional methods of composition, and to the sensuous effects and subtle suggestiveness of words apart from their definite ideational content. In painting and sculpture, it has been largely coupled with the relations between design and subject-matter; with insisting on the importance of perceiving the former directly, as opposed to thinking only of what is represented. The form of a painting, it has urged, is not mere technique, a means to telling a story, but is something worth while in itself; in fact the chief factor in determining the picture's value. This attitude toward painting is clearly expressed in Pater's essay on *The School of Giorgione,* in *The Renaissance.* In present thought, however, it

has been more directly an outcome of the works and ideas of the French impressionist and post-impressionist painters.

Both of these movements in their present state are far from scientific, but they are tendencies in that direction in so far as they stress accurate detailed perception of the actual structure of a work of art, and investigation of its peculiar psychological causes and effects. They are movements away from the naïve and mystic stages in which tertiary qualities are experienced only as immediate, unexplained and unanalyzed wholes, and toward a stage where such qualities are traced to their various coöperating causes, in the object and in the personality of the beholder. Whether such a tendency is on the whole for better or for worse; whether or not it makes for greater enjoyment or appreciation, is a question we need not raise at present. We are not assuming that all criticism should become more scientific, but are asking how it can become so if and when one's aim is the acquirement of generalized knowledge.

"Experimental Æsthetics" Broadly Conceived

As applied to the method of Fechner and his followers, the name "experimental æsthetics" is a misnomer, for that method is too narrow and rigid to deserve the name. Broadly conceived, an experimental attitude in æsthetics would imply making use of all possible clews to the nature of æsthetic experience, from a variety of sources and modes of investigation. It would imply putting all these clews together, and on that basis working toward tentative generalizations through induction and the testing of hypotheses.

As to observation, it would imply an active collection of all sorts of data which seemed fairly relevant, choosing of course the most promising and the most reliable, but at first erring on the side of indiscriminateness rather than of exclusiveness. Many past approaches to æsthetics have been side-tracked by a too narrow definition of the subject at the start, and by rigid preconceptions as to its proper aims and methods. With a mass of material brought together, one can begin eliminating the least relevant and trustworthy; but facts which at first seem irrelevant often turn out to be clews to some yet unsuspected reality, other than the one being sought.

In the following chapters, several different sources of data for æsthetics will be discussed, among them educational and psychological experiment, art history and certain aspects of the use of words.

The outstanding need, however, is for much direct study of concrete works of art in relation to æsthetic problems; for criticism which shall be coördinated by a general comparative interest, but specific in its reference to particular objects and their effects on the beholder. There is need for many records of fresh æsthetic experiences by observers of different types, expressed as clearly as possible under the circumstances, but with no rigorous effort at the start to distinguish subjective elements from objective, personal peculiarities from universally demonstrable facts.

There is no obstacle but the inertia of tradition to prevent æsthetics from undertaking an extensive program of direct comparative observation of particular examples from various arts, with the aim of discovering common and divergent qualities of form. This would imply a breaking down of the arbitrary distinction between æsthetics and art criticism. It would imply an effort to make all general theories grow directly out of detailed analyses of works of art, instead of being merely illustrated with occasional examples, as in most past and present writing on æsthetics.

Study of the sort proposed would differ considerably from the usual present work of art critics, historical researchers, and students of art appreciation. In the first place, a surprising amount of this work is done at second-hand, through text-books, abbreviated summaries, photographs and lantern-slides, and can not be classed as direct experience of works of art. In the second place, the study of the arts is now a highly specialized, compartmental affair. In colleges and art academies, in books and journalistic comment, music is taken up by itself, painting by itself and literature by itself. Even literature is customarily divided on the basis of languages, and too little effort is given to comparison between the divisions. Æsthetics is a separate subject, as are psychology and scientific method. Few critics or historians of the arts are familiar with these subjects in addition to their own material. As a natural consequence of this specialization, the study of each art is pursued without much comparison with

the other arts, and with little reference to the requirements of logical thinking or to the psychological aspects of æsthetic value. By contrast, the proposed type of study would be not only direct and extensive, but coördinated in all its parts, toward the developing of generalizations about æsthetic forms and experiences.

It is impossible to over-estimate the importance to æsthetics of direct, spontaneous and not too narrowly controlled experience of works of art. But modern science teaches also the value of hypothesis in suggesting new fruitful ways of investigating and organizing data. Although it is wise to regard all past theories of æsthetics with some suspicion, it is equally wise to utilize them as suggestions.

The fact that classical theories may have been based on false metaphysical assumptions, or otherwise supported with unconvincing arguments, does not mean that they are entirely false. Much wisdom, and much direct criticism of art and other values of life, have gone into them. From a few cases or a single case, a penetrating mind can leap to generalizations more profoundly true than those a plodding one could infer from countless instances. Almost in spite of themselves, the classical idealists derived from contact with the physical world a notion of perennially vital questions and possible answers, unconsciously twisting their logic to suit. Their systems, therefore, may be rich in problems and hypotheses for science, while their method of reasoning is powerless to separate the true from the false, or to deal with contemporary situations.

Since the field of æsthetics is yet uncharted by science, the thinking of great modern philosophers and critics within it may have at its best the same sort of value as that of the early Greek philosophers. They were critics of all experience, divining within it, along with figments of their own imagination, real atomic and logical forms whose outlines modern science has still to clarify. Like them the modern critic may be intuitive, clairvoyant, in no supernatural sense, but as a revealer of subtle relations and values, a prophet and guide to future science. A hint from such a thinker—for example, Pater's dictum that "All art constantly aspires toward the condition of music"—if not the whole truth, may be invaluable as a hypothesis to a student of the history of form.

An important task of experimental æsthetics is to utilize past speculative theories as suggestions to be tested and developed. Much that is obsolete, false and irrelevant will be found in them, along with much that can be made to stand on its own feet in modern terminology. For example, Plato's theory of the effects of certain kinds of music on the will and character can be considered quite apart from its philosophical context. Aristotle's theory of tragedy as a purging of the emotions may not apply to all kinds of tragedy, or to all ways of experiencing them; but it deserves reconsideration from a modern viewpoint (in relation to psychoanalysis, for example) and testing to find out its value as an explanatory principle to-day.

As to the meaning of testing or verification, we need again a more flexible conception than obtains in the exact sciences. We can not hope to prove æsthetic theories definitely true or false by recourse to concrete instances; but there is a middle course between that and pure dialectic. One can, in a broad sense, test a given theory in practice by going directly to a variety of relevant objects of art with that one theory uppermost in mind, and by noting the extent to which that theory is borne out by one's own experience of the objects. The æsthetician has not finished his task of observation when he has looked a few times at a given work of art with an open mind; he should return again and again to see it in the light of various possible theories, and to compare it with such other objects as each theory suggests.

In the absence of some such directing idea, one's attention to a work of art is apt to be distributed over a multitude of details, with the result that no particular linking up of facts with theories is made. As to recalling the object and discussing it later, most people overestimate their ability to remember accurately. The memory-image soon becomes faint and blurred, colored by other memories, and very susceptible to outward suggestions. There is no substitute for the immediate squaring up of a particular belief with the particular facts it is supposed to cover, and in the absence of such contact æsthetic discussion is likely to remain "up in the air."

The chief difficulty in testing classical æsthetic ideas, it will be found, is their extreme generality and consequent

vagueness. "The ugly," "the sublime," "the harmonious"—what energy has been spent in trying to give these traditional categories permanent definitions, and to decide whether a certain case belongs under one label or another! By shuffling about these concepts and a few docile examples, more than one theorist has produced a system that looked both new and illuminating as long as it was kept safely between the covers of a book. The traditional dogma that "Æsthetic theory is a branch of philosophy, and exists for the sake of knowledge and not as a guide to practice" [4] has saved many lofty doctrines the shock of having their emptiness revealed. Without being tried as a guide to practice, no theory can be made reliable and genuinely explanatory.

For this reason, along with others to be noted, the experimenter is likely to find that the less general concepts of art criticism are often more illuminating, as guides and explanations in actual experience, than the broad and "fundamental" ones of classical æsthetics. The principal difference is that æsthetics usually speaks in glittering generalities, while criticism tends to apply its concepts to some particular work of art, or at most to the works of some particular artist, school or period. The aim of the latter is to characterize or appraise some specific subject-matter, and its terms, while general enough to be frequently applied, are consequently more specific also. Where the æsthetician defines "beauty" and "creativeness" in the abstract, the critic states that a certain piece of music is a "weak imitation of Brahms"; that a certain statue is "unbalanced and overdecorated on the surface"; that a cetain poem is "witty, urbane and epigrammatic"; that a certain painter or school excels in "rich, glowing atmospheres, full of sunlight and brilliant coloring." Such judgments may be to a large extent subjective and debatable; but they are also fairly specific and intelligible. One can go to the work of art mentioned and face a fairly definite issue, as to whether the terms applied seem to be just, whether some other terms would be more so, and whether the present terms would be more suitable to some other example. In so doing, one is treating each of these ideas as a hypothesis in one's own experience.

The next step is to compare the results with those of other critics. An essential phase of all experimental science

is that of comparing notes; a mutual checking up of findings between workers in the same field. It is a process that has never been systematically developed in æsthetics, but it is quite within the scope of possibility. The details of this and other phases in experimental æsthetics will be considered in the following chapters.

CHAPTER II

THE ANALYSIS OF FORM

A Descriptive Attitude in Criticism

THE movement toward a descriptive study of form begins whenever a critic makes an effort to perceive a work of art clearly and as a whole; to explain his feelings toward it by tracing them to specific observable details in the object.

Such an attitude is intermediate between two extremes. One, that of casual enjoyment or hasty criticism, tends to notice only a few details, or the whole thing in a vague and blurred manner; to sense rather than to perceive it; then to feel an immediate affective response, such as liking or disliking, which may find expression in broad evaluative terms like "beautiful" or "ugly." There the matter rests; the judgment expressed is final; attention wanders or remains fragmentary and superficial.

The other extreme is an attempt at a rigorously objective account of the work of art, as a zoölogist might describe a butterfly, excluding all affective terms, putting down only what any observer with normal sense-organs (and perhaps a microscope) could observe. A critical analysis of a work of art would include, in addition, affective responses and perhaps associated imagery, but with a persistent effort to relate them to perceptible features in the object.

As we have also noted, it is a common human trait to think and speak as if such effects on the beholder were properties inherent in the object which stimulated them. The critic should not be overanxious to express all his experience in terms of his own responses, in the hope of being more scientific. Even a zoölogist says that the butterfly is yellow, and not that he has a sensation of yellowness when he looks at it. Likewise the critic naturally says of a picture, not that he feels a response of empathy toward it, but that its lines are rhythmic and swirling, and move toward a certain point. To try to translate æsthetics entirely into psychology would be cumbersome and impractical. In the

first place, no adequately specific psychological terms exist. In the second, we should tend to falsify a distinctive characteristic of æsthetic experience: that it occurs largely *as a projection on* the work of art, as a feeling that certain qualities are *in* the work of art. If the critic were to transfer his attention too much to his own responses, most of them would immediately cease to operate; self-consciousness would stifle them. Another reason is that the structure of the work of art is one of the two main determinants (along with individual personality) of the nature of the response.

It is therefore necessary for æsthetics to observe and describe the various forms of art, not entirely apart from human responses to them, but in their own right as distinctive stimuli. The experimental way to do this is to take as starting-points the affects or "tertiary qualities," roughly distinguished by critical terms; then to work gradually toward a more distinct recognition of those factors in the stimulus which helped to determine them.

In a sense we can not analyze any æsthetic quality in a work of art, or any other perceptive or affective quality as such. It is present in experience as an irreducible whole, and is different from the sum of any number of psychic elements into which we could try to analyze it. But it does not follow, as some critics have argued, that all analysis of æsthetic form is impossible. In distinguishing the various factors that go to make up a work of art, we are not analyzing the affect itself, but the complex stimulus which produced it. We are thus working toward a partial explanation of it by discovering some of its causal antecedents.

There are two necessary phases in this type of criticism. One is the effort toward clearer perception of form; the other is the effort to express its results in words which will indicate them to others. These phases can proceed hand in hand, each assisting the other.

Organic Perception of a Complex Form

This phase of criticism requires keeping one's attention fixed with some steadiness on a particular work of art, and trying to grasp its chief elements in their interrelations. It is not a passive, dreamy contemplation, or a listing of miscellaneous features one after the other, but an active, selective

scrutiny and coördination of details. It involves alternating an analytic with a synthetic attitude: first to dissociate a vaguely sensed complex into its parts, then to reassemble these parts into an organic whole.

The word "form" is often used in one of several narrow senses. In the broad sense intended here, it is any distinctive way of organizing the materials in a work of art. It is not a detachable framework, but (in Pater's words) the distinctive "mode of handling" the subject and materials. In music or poetry, one has not grasped the form in merely identifying a conventional pattern, such as the sonnet or fugue. There is all the difference in the world between sonnets, and to describe the form of one is to recognize and state the distinctive characteristics, of whatever sort, that make it different from all others. If a fugue makes use of peasant folk-tunes for its melodies, then to describe it one must recognize not only that fact, but the peculiar mode of handling them, the ways in which they are woven together, varied in rhythm and key, and enriched with harmony. In painting and sculpture, the word "form" is sometimes limited to the linear pattern or to the shapes of masses; but the broader conception would take in also the lines, lights and shadows, colors, spaces, even representative and expressive effects—in so far as they are made to coöperate harmoniously toward producing a single cumulative effect on the beholder.

For the sake of clear perception, however, it is necessary to distinguish to some extent certain main groups of elements in such a total form. These are the sensuous materials (e.g. tones, colors, lines, masses, word-sounds, considered as individual units); the same materials as coöperating factors in a design (e.g. a sonnet, façade or sonata); and the natural objects represented, the ideas or emotions expressed (e.g. trees, houses and sunlight in a landscape; religious, moral or dramatic interest, a gay or tragic mood).[1] For a beginner in art-appreciation this is especially important, since his usual tendency is to overemphasize representative and expressive effects. At first it is well for him to practice ignoring these effects, and attending only to the others. With a picture, for example, one can stand at a distance, or at an acute angle with the plane of the canvas, or perhaps turn the picture upside down—anything to grasp the effect of the colors, lines

and masses in themselves, without regard to what natural objects they stand for. Afterward, he can return to perceive both elements in their mutual relations. Some critics would have him ignore subject-matter forever; but this is an extreme and unnecessary attitude, taken by few artists, and destructive of many important values.

The separation between these various groups of elements can never be sharp if the work of art is a thoroughly organized one; but emphasis can vary from one to the other, both in the work itself and in the beholder's mode of perceiving it. In literature, especially prose, the importance of direct sense-perception may be relatively slight. Even the sound of the words, heard or imagined, may in some cases not count for much. The form must then be sought chiefly in the way the expressive materials are organized; the way various associated ideas and images are called up in order—certain beliefs and desires conflicting, events moving toward a climax, or merely dragging along in a slow monotony that itself gives a definite cumulative effect. A common-sense attitude in such cases is, not to try ignoring the expressive elements entirely, but simply to keep from wandering far into trains of private association. One can try to grasp whatever associated thoughts and images the artist seems to have intended, without drifting into remoter day-dreams, or into questions of general theory and valuation.

If there seems to be a definite pattern the observer should seek to analyze it by singling out conspicuous recurrences of a theme. He should be on the watch for any distinctive melody, color, shape, phrase, character-motive or idea which returns with recognizable similarity. He should note when or where it recurs, with what minor variations, and in what new contexts. If there are, as usual, two or more strongly contrasting themes, he should note how they are juxtaposed to accentuate their contrast, and how at times, perhaps, they are bridged by an intermediate or composite section. Then he should look to see how they are woven together, as by opposition, balance and the subordination of minor to dominating elements.

But frequently no such clearly marked pattern will be found. The only organizing principle in the work may be some pervasive, subtle but characteristic atmosphere. In

impressionist painting, this may be only some peculiar iridescence of light and color; in literature some intangible mood; in music, what is vaguely called "tone-coloring" or "atmosphere." A descriptive attitude in criticism will emphasize the task of stating clearly what the facts are in a given case, before trying to appraise their value.

In every art, there is a much greater variety of actual aims, interests and effects than persons unacquainted with it are apt to expect. Knowing only one kind, a person develops fixed habits of perception as well as of preference: he tends to look at all works of art in the way that kind requires, expecting them to produce a similar effect. One expects all sculpture to represent a physically beautiful body; all novels to have a definite plot. Coming in contact with a work that has a different aim, one tries to interpret it in the usual way; and the result is only uncomfortable perplexity, a sense of distortion and confusion, which one attributes to the work of art itself. One misses the positive effects the artist intended, and is conscious only of the failure to find something else.

This is especially likely to happen in coming for the first time upon a primitive, exotic or unconventionally modern work. In a statue which aims for rhythmic repetition of planes and masses, one sees only their failure to fall into correct anatomical positions.[2] In a poem of irregular rhythm one is conscious only of its failure to fall into the expected regular beats. The only way to develop flexible and sensitive powers of perception is to keep subjecting oneself to a great variety of unfamiliar forms; to make plasticity and open-mindedness themselves habitual. The most highly trained connoisseur is sure to lose this plasticity if he confines himself entirely to one special field.

Perception, like reasoning, can be experimental. Attention can be kept alert but varied in direction; not too rigidly fixed on one aspect or theme, but turned here and there as one would look in a foggy street for outstanding features that may give a clew to the rest. A good order, on the whole, is to experience the object first in a general, unselective way, without looking for anything in particular or trying to recall what any one has said about it. If it is a picture, stand off at a distance, so that details are merged; if a

poem or piece of music, read or hear it first with no definite purpose, merely to let its total effect "sink in" as much as it will in an easy and natural way. Then come back to it later on, to pick out its main constituent parts, its chief themes and distinctive qualities, noticing each of these as a whole without too much attention to subordinate details. Then each of these wholes—say a certain melody composed of several phrases; the complex motives of a single character in a play; the drapery on one painted figure—can be analyzed in turn into its elements. There is a dangerous tendency in perception to let one's attention be caught by some one familiar or conspicuous detail, and thus to miss the larger structure into which it fits. Finally, or at repeated intervals if the task is hard, one should take a general view as at first, but more synthetically, working always toward a more organic perception instead of the first blurred and superficial one.

It is a familiar fact that some objects are more easily perceived as wholes than others. A page containing only a circle, for example, is easier to grasp as a whole than one full of irregular figures; a popular song than a symphony. Wherever a part is continued or repeated with recognizable similarity, it tends to make the whole form easier to keep track of at once. But it may also tend to become monotonous, like the ticking of a clock; we become anæsthetic toward it, or, if it is forced on our attention, it becomes irritating. In some phases of art, such as architectural ornament, the artist does not care to make us conscious of separate details, and so repeats them with extreme uniformity. In others, he tries to keep our interest stimulated with frequent surprises, and so repeats a theme with minor variations and irregularities. In still others, he wishes to startle and excite us with sudden shocks: a *sforzando* or an unprepared change of key; the entrance of a radically different melody, color or shape; a quite unexpected turn of events in fiction. In a broad sense, these are examples of disunity; they are breaks in the smooth flow of parts, and in that sense no work of art is a perfect unity. But even these contrasts can be to some extent woven together, reintegrated as parts in a comprehensive scheme. The surprising incident is shown to be one that might logically have happened under

the conditions; we hear the first melody again with a sense of familiar recognition, as of coming home after an adventure.

Works of art differ widely as to the extent to which they introduce these sudden breaks, and also as to the extent to which they try to link them up again. The observer should ask himself, then, whether any gaps and shocks that he feels are due to his own failure to perceive the relations which the artist has indicated, whether they are intended by the artist as parts of a total plan, or whether they are unintended faults in the machinery of the work of art itself. Conversely, he should ask if he is noticing all the discontinuities that actually exist in it, and be on the lookout for those of both kinds, the intended and the unintended.

Often after repeated failures, the *raison d'être* of some apparently wrong detail will suddenly flash over one: the distorted table-top in a Cézanne still-life comes into relation with a folded table-cloth in another corner of the picture, as a repetition of line and mass. The larger order into which everything fits has been there all the time, but one has been overlooking some detail that completed the circuit. For this reason it is best not to push perceptive effort to the point of fatigue at any one time, but to come back another day with a fresh viewpoint. Unconsciously, one's nervous mechanism may have kept on organizing the images in the meantime. In the same way a form that seemed solid enough at first glance will disclose weak spots, glaring discrepancies, limping, illogical transitions that were superficially glossed over, as in a thrilling mystery play whose solution one thinks about on the way home.

A form may be made complex, not only by multiplying themes and variations, but by bringing more radically different factors into play. Thus a line drawing may be made more intricate as such, or may be complicated by the addition of light and shade and color. A melody for violin alone may be made into an intricate arabesque, or it may be kept simple, and a complex form be built up by adding other voices, each pursuing its own pattern simultaneously. Thus a musical composition may involve coördinating melody, harmony, rhythm, counterpoint and orchestration. In opera, the sense and sound of words, the action, costumes, scenery

and lighting effects are additional factors to be coördinated.

The observer's task at any given moment—say the elevation of the Grail in *Parsifal*—is to ask himself what total synthetic effect on the beholder is intended; and how each factor operating at the moment contributes its share—how each previous moment has contributed by leading up to it. He may find that a particular factor is weak: the singing, or the lighting; or that one obtrudes itself on the attention—an overloud orchestra, perhaps; or that the action calls for a mood which the music tends to counteract. In a well-organized work, one is apt to find it harder to think of the factors separately; but comparing the work with others less unified, or imagining how the present one could be changed a little in each factor, will help to reveal the part each is playing in the whole.

Tentative Criticism

One's first experience of a work of art, superficial as it may be, usually includes an immediate feeling over and above mere perception. This may be a positive liking or disliking, an intense emotion, a definite critical judgment, or it may be only mild interest or boredom. To express that feeling in words is not at all a necessary part of æsthetic experience. To persons of a certain temperament, anything more than the proverbial "Hm!" is an annoying distraction. But to others it is a natural and continuous part of appreciation, and it is a necessary phase of both criticism and æsthetics.

Inadequate as any words are apt to seem, a little effort to find the right ones is often an aid to clear distinction, for oneself as well as for others, of the specific qualities felt. But it is dangerous to try for exact words too quickly; the attempt will distort and stifle other sorts of response. It is best to have the full experience first and then speak or write about it; not a long time afterwards, when it has become a little hazy, but as soon as the response has taken shape, and can lead naturally to expression.

Neither the feeling, nor the finding of words to describe it, is a matter that can be entirely controlled by reason. Both are largely automatic processes of apperception and association, in which the sensory responses start further rever-

berations through the organism, setting in motion some of the waiting machinery of habit and memory, of innate and acquired predispositions to respond in a certain complex way to a stimulus of that type. The finding of suitable words is a part of this associative process. If in the past certain words have been used or heard in more or less similar situations, they tend now to come to mind as an immediate result of that felt similarity. In proportion as one has become familiar with works of art like the one at hand, forming certain habitual attitudes toward them, and learning to express these attitudes in words, the process will now be quicker and easier, less groping and uncertain.

The chief danger attending it is, as usual, one of habit-fixation. There will be a tendency to pigeon-hole the new object at once after glimpsing some few conspicuous features of it; to respond in feelings and words as one usually does to objects having those few features. So standardized, criticism becomes hackneyed and perfunctory. It speaks in clichés, like the term "whimsical" in regard to anything by Barrie. An experimental attitude here would involve a suspension of final judgment, but not necessarily any sense of restraint that would weaken the first spontaneous response. Strong and positive as that response may be, it can be followed up with further investigation.

In exactly the same way, a comment about the present object by some other critic can be followed up as a hypothesis. In going to a play after reading a newspaper criticism of it, this would imply listening for particular lines and incidents in the play which support or contradict that criticism. To work still further toward definite verification would be to read the play later, select these evidential details, and trace their exact bearing on the hypothesis in question. Any general critical or evaluative term suggested will be linked if possible with demonstrable elements; with actual lines or spots of color that one could point to in a painting; to notes that one could point to in a musical score. If the quality alleged is something more pervasive, that can not be traced to a few definite points, it may at least be possible to find places where it is especially manifest, or bits scattered through the whole which exert a cumulative effect. In a picture there may be a slight but constant tendency to elon-

gate every object; in a piece of music, to reiterate augmented fourths, briefly and quietly in some inner voice, so that little by little they make themselves felt as a troubled undercurrent.

Still one may have to describe them in emotional terms, such as "troubled." But one is working always toward more distinct recognition of the factors which are contributing most powerfully to that particular emotional effect. Emotions and their causes in the form are recognized and characterized ever more specifically. Things are no longer merely "nice," "unpleasant" or "interesting," as at first. They are "sparkling," "ponderous," "lilting," "harsh," "crisp," "dainty," "melting," "rich" or "barren." More and more of such words come to mind, as one contemplates different parts of the object. One has distinguished separate themes and factors, and can describe each separately, and the relation of each to others. One melody is wild and tormented; another, grave and sedate, answers and finally dominates over it. Bit by bit such comments will grow into a description approximating in organic structure the work of art itself; yet also, in a sense, a narrative or autobiography of one's adventure with it. The account will still be of how one individual sees and feels it, but more and more it will become an account of this particular object as distinct from all others.

In the process, the critic is quite likely to have to alter the snap-judgment he began with. What seemed at first confused is now orderly; what seemed ugly and horrible is merely odd, bizarre and fantastic. He may never come, especially if the work is complex and many-sided, to any way of perceiving or describing it that satisfies him as complete. In each contact with it he will discover new details and relations, and his description of its form will grow with his growing powers of perception. But on some points he will find his first impressions confirmed and traced to definite causes, which are there for all the world to see. He will know, now, that his quick feeling of a picture's weakness and confusion was due to the fact that certain objects in it do not take definite positions in space, but appear at the same distance from the eye as other objects which overlap them. He will have traced his feeling of vague disappointment at a story's ending to the realization that a certain conflict was left undecided, or settled in a hasty, arbitrary way.

Comparison of Forms and of Media

To describe anything we must, consciously or not, compare it with others. Making this comparison direct, specific and systematic is the best way to recognize the distinctive qualities of each work of art. Otherwise our description of each is apt to be promiscuous and unenlightening; for there is an infinite number of things to be said about any one. A significant account will emphasize the few qualities that differentiate it from all others, while at the same time orienting it with reference to the general type or types to which it belongs.

It is hard to compare many objects at a time, and the wisest course is to take two or three at once, then two or three more. Museum-goers usually make the mistake of looking at too many things in a single trip, with the result that they become confused and fatigued, and remember nothing in particular. For the description of form, it is a good plan to pick out two works in the same medium, and begin by noting obvious general similarities and contrasts between them. Of two landscapes one has brighter colors, the other sharper outlines, and so on. Item by item, one will work out a fuller account of what each has to offer that the other does not. As more and more objects are thus compared, one becomes practiced in going quickly to the essential features, the unique contribution of each. As data for æsthetic generalization, it is desirable that accounts of each object should not be too fulsome, but come to the point concisely.

As mentioned in the first chapter, there is great need in æsthetics for comparison of examples from different media and different arts, as opposed to the present over-specialized study. Only by this means can sound generalizations be worked out as to common tendencies in all the arts, the peculiarities of each, and such interrelations as the far-reaching spread of the Romantic movement. This phase of æsthetic theory has suffered like the rest from much dogmatic assertion about the "proper aims and the limits" of the various arts, as if these could be decided in advance. The growth of art is a constant breaking down of limits and finding of new aims, and the present need of æsthetics is for more exact informa-

tion on what actual common and divergent tendencies have occurred up to date.

A useful line of investigation is to compare what has been done in one medium with what has been done in another: painting in water-color, say, with painting in oils; both with stained glass windows. One will notice certain common forms and influences from one to the other, such as the imitation of Renaissance painting by workers in stained glass, tapestry and mosaic. By comparing the rendition of similar forms in these different media, one can inquire which medium is the most effective as a means to a certain end. If the aim is a flat pattern of great brilliance and luminosity without much representative realism, the stained glass will perhaps appear to have the best of it. When one tries to model in the round, suggest deep space and natural tints, stained glass will on the whole be less successful than oil painting. Likewise in music, violins will be more easily adaptable to flowing, continuous tones, percussion instruments to a decisive staccato.

It is frequently stated as a positive æsthetic rule that the artist should "exploit the potentialities of his medium," "harmonize medium with design" and so on. This is an extremely suggestive lead to follow up in comparative analysis. It may give important clews to the reason for a general effect of weakness and disunity, or of perfect harmony and strength. One can try, for example, to imagine how well a certain form could be transposed to another medium: as from verse to prose, or from piano to string quartet. In some Egyptian statues, the designs are as solid and rigid as the stone of which they are made, by contrast with the late Greek, which seem to be trying to defy these properties of stone, and turn into soft, warm animation.

The danger lies in jumping from such descriptive hypotheses to rules and general valuations. It by no means follows that an artist should limit himself to those types of form for which his medium has in the past seemed most suitable. We can discover the potentialities of a medium only by experimenting with it, not *a priori*. And a work of art may appeal on other grounds in spite of a certain struggle with its medium—perhaps even because of it, as in the sculpture of Rodin. Perfect harmony is not the only possible aim in

art, as the rebels of each generation have to demonstrate anew to its worshippers.

Comparative study has another use: that of suggesting terms to be used in description. The best way to convey the idea of any direct experience is often to liken it to some more familiar one. For describing an odor, there are certain general terms such as "fragrant," "acrid" and "pungent." But to characterize one specifically, we usually say that it is like some better-known odor: aconite, for example, is said to have the smell of bitter almonds. If it were not exactly like any other, we might say that it was "somewhere between" two specified perfumes. Likewise, the most vivid way to describe a certain painted shadow may be to call it "Rembrandt-like"; to describe a general musical atmosphere may be to say that it is "somewhere between Strauss and Debussy". A common term like "simplicity" is apt to be too vague to characterize clearly. Yet very different kinds of simplicity are suggested by the words "Egyptian," "Mozartian" and "Wordsworthian." Of course the critic should be prepared to follow up such an analogy with specifications, but even alone they are a start towards orienting the form and the experience it causes, in relation to others.

Form-types

Through centuries of comparison, mostly casual and unsystematic, the subject of art criticism has developed ideas of countless different types or recurrent qualities of form: "the grotesque," for example. Insofar as a person has had direct experience of art, such terms will not remain for him mere verbal abstractions, but will be names for composite images built up automatically through the memory of many concrete works of art. Then if the word "grotesque" is mentioned, it will tend to call up before his mind's eye a vague composite of many gargoyles, dwarfs in literature, or other things with which he has coupled the word. At will, he can clarify this image into one definite example after another.

Such conceptions, referred to by name and significant to those who read them, occur by the thousand in literature and in criticism. Books on general æsthetic theory usually mention a half dozen or so, calling them "*the* æsthetic types" as if the list were thereby exhausted. They go on to define

them in an abstract and *a priori* manner, and perhaps to mention and explain a few illustrations of each. The types thus included are only the most broad and comprehensive, such as the beautiful, ugly, sublime, comic, tragic, witty, satiric, charming and pathetic. The usual implication is that all the others can be reduced to or classified under these, so that æsthetics need take account of no more. Persons who have had much to do with concrete works of art, however, often feel that such classification is rather unsatisfactory, and does not help them much in organizing the great variety of their experiences. They sometimes jump to the other extreme, and say that no general classification of art-forms is possible, each being unique in itself. The names of conventional patterns in the various arts (the epic, lyric, novel, symphony, and so on) are likewise limited in utility, since they give only the shell and not the spirit of organization, and since new forms are constantly arising (like the symphonic poem and modern novel) which cannot be classified under the old definitions.

The fact that art criticism can express itself at all in general terms, and be fairly well understood, is evidence that æsthetic forms and experiences can be approximately grouped under headings. But the present gulf between criticism and æsthetics is also evidence that the latter needs to take a different attitude toward the question of types. It should, in the first place, build up its types by a more inductive and experimental method. It should recognize and study many more different types than it does, and be in no hurry to set exact limits to each or arrange them in formal hierarchies.

Any term frequently used in criticism to characterize a work of art: any adjective like "weird" or "turgid," "bombastic," "urbane," "precious" or "flamboyant"; any noun like "decadence" or "sentimentality," any phrase like "the grand manner," should be considered as an æsthetic type, as a category for organizing æsthetic data. It should be studied more or less distinctly as a tool of thought, and its connotation and denotation clarified through use in descriptive criticism.

Such terms are usually applied in more than one art. To trace their concrete applications would be an excellent way to pursue the subject of comparative æsthetics: that is, to look for common and divergent tendencies among all the arts.

A type may be symbolized also by the name of some well-known particular work of art, or some part or character in one. We frequently hear of the "Mona Lisa type" or of the "Venus de Milo type," as a way of describing a real or represented person. The analogy is not always based on a mere physical likeness: it may be the possession of a more subtle, complex quality or sentiment in common. For example, we speak of a "Hamlet-like" character; the "Faustian spirit." We may speak of the "*Liebestod*" theme in any situation of art or life where intense tragic passion is involved, and where life seems well lost for love.

The symbol may be the name of a particular artist: the Byronic, the Miltonic, the Chopinesque, the Raphaelesque. Even music can be called "Homeric" if it is simple, majestic, animated and powerful. To use such a term of course involves the selection and composite image of some quality thought to pervade and distinguish the works of that man. Likewise, we may generalize on the forms of some school of art, some nationality or epoch taken as a whole. This again involves a selective merging of the works of many artists into a larger composite. Vague as it may be, it is often significant. To some one who knows the paintings of Carpaccio, Giorgione, Titian, Tintoretto and Veronese, it is enlightening to say that a certain novel has a Venetian richness and splendor, even though the story has nothing to do with Venice.

All such comparison through composite images runs the risk of being based on incomplete perception and dubious generalization. What, for example, is the Raphaelesque? To one it suggests a divine perfection of beauty; to another a rather brittle, sentimental prettiness. The term can not be satisfactorily defined through abstract argument, but it can perhaps be clarified a little through more careful analysis of Raphael's paintings and comparing them with others. We are apt in such broad concepts to ignore negative instances and oversimplify the facts. Words like "classic" and "romantic" cover so many diverse forms that they are apt to be more misleading than helpful in criticism. As we realize these diversities more and more, the only course is to abandon the word, or go on looking for some preëminent and pervasive distinction to which it can still be attached. Often it is

necessary to split up the concept into two or three divisions. So we distinguish the "*Sturm und Drang*" Goethe from the Olympian one; archaic Greek sculpture from Phidian and late, whereas a less exact person speaks of Greek sculpture as if it were all the same. To sharpen our critical vocabulary we need constant intensive study of each of these concepts, to link it more carefully with concrete examples, and to translate it into other terms which, taken together, seem to be an approximate equivalent for it.[3]

Redefinition of Terms

A constant obstacle to clarity of discussion is the ambiguity of words. The human stock of ideas grows faster than language to convey them, and old names are constantly being attached to new ideas, sometimes with accompanying words to show the difference, but often without. The history of any word long used in theoretical writing will show its association with many different objects, qualities and beliefs, and in present usage it will tend to carry with it vague hints of these past associations. Different persons will use the word with intent to convey different ideas, and discussion will be at cross-purposes. An argument over whether a certain picture is "beautiful" or "ugly" is apt to end in confusion because of the ambiguity of these words, aside from whatever underlying differences of feeling and opinion exist. Two persons may agree that it is "ugly," while one understands the word to mean "repellent, lacking in all æsthetic appeal"; the other understands it to mean simply "distorted, grotesque," like some Chinese carvings which are not at all unpleasant. Or they may disagree on the application of a certain term for the same reason, while their feelings toward the object are in accord.

Dictionaries, learned societies and writers whose authority is respected can help in the matter by deciding on certain definitions, but much ambiguity is often left over in spite of all they can do. A persistent obstacle to progress is the attitude which many persons take toward definition. They assume that there is some one right meaning for every word, by the nature of things, and that a definition cannot be "true" which gives any other. They become emotionally attached to a certain word-meaning relation, and if any one proposes

another, they suppose that he is necessarily disputing their basic beliefs. There is a long philosophical tradition behind this attitude, and it can even be traced to primitive "word-magic," which assumes a connection in fact between a name and the thing it specifies. The more scientific view is that there is no one right definition for a word; each word is a symbol to which various meanings are attached by common usage, and there is nothing to prevent us from redistributing them in a more convenient way if we wish.[4]

In art criticism, then, one should not argue that a certain term *really* means so-and-so, but find out what various ideas it is made to mean, and what attitudes or types of response toward various works of art it seems to indicate.[5] Under the heading of each important critical term, one should list its approximate equivalents in other languages, and the chief general connotations of each. Dictionary definitions alone are often too brief, and omit recent senses of a word, so that study of its actual usage is necessary. When a writer does not define the term explicitly, his general meaning can usually be inferred from the context. One should list also the objects to which it is applied, theories associated with it, and other words used as synonyms and antonyms.

With a representative array of such data, in regard to many different words, one can try to distinguish merely verbal questions from others involving deeper conflicts of belief and attitude. It may be that some issues can be more clearly stated by redefining terms: that is, by detaching a certain meaning from a word that is very ambiguous, and deciding to call that meaning only by a certain other name. For example, we might decide to use the word "grotesque" for the favorable meaning of "ugly" just mentioned. In rare cases, an entirely new symbol may have to be coined.

What æsthetics needs in its terms now is more narrow, sharp precision, to make them more effective tools of communication. It has no lack of broad, comprehensive terms, or of terms with vague auras of poetic suggestiveness. Thinking in the manner of Croce's *Æsthetics* is for that reason apt to be more confusing than enlightening. It tries to define every concept in terms of every other: to show the "identity" of science, art, criticism, expression, intuition and so on, by emphasizing points at which these concepts over-

lap, and ignoring differences. Such verbal interlocking gives a false impression that the subject-matter itself has been genuinely organized and explained. Study of the overlappings and inclusions among concepts has its useful function if words are not mistaken for underlying facts, but philosophically minded theorists usually tend to exaggerate orders and hierarchies. We have more need at present for clear distinction between definitions, so that we shall know what is meant when a certain word is applied to a certain case.

Histories of Form

The study of form-types is obviously bound up with that of the history of art. Where æsthetics aims at principles, history aims at genetic and chronological sequences. But if æsthetics becomes inductive, it must turn to history for a large part of its data; and if art history becomes critical and philosophical, it must apply æsthetic concepts. The difference between the two will thus be largely one of different ways of organizing the same facts.

It is not generally realized how small a proportion of historical writing on the various arts is genuinely concerned with the history of forms. Most of it is history of miscellaneous facts associated with these forms: the names, dates and biographies of artists, the titles and subjects of their principal works, leading events and environmental conditions of the time, and so on. As to the nature of the works of art themselves, in terms of such form-analysis as we have been considering, there is sometimes not a trace, and often only brief, incidental and conventional comment. The facts given may be interesting in themselves, and contribute to one's general culture. They may, if attractively written, cast an indirect glamor on the subject of art by leading one to imagine the romance of past civilizations and of being an artist. But they are misleading in so far as they are supposed to give an acquaintance with art itself, and in practice the mass of facts they present often tends to come like a screen between the student and the directly observable qualities of the objects he is learning about. He has so many things to remember that he cannot approach the work of art freely, with his eyes and mind open, to receive what it has to say.

The researches of experts on art history are as a rule made

from some direct study of examples, but they tend to emphasize other aspects than form. There is much attention to small factual matters not directly connected with æsthetic qualities: for example, in the visual arts, to the question of correct "attributions." Great pains are devoted to separating the genuine works of a certain man from works wrongly assigned to him, to detecting counterfeit signatures, and to supporting guesses as to the authorship of unsigned works. High fees and public interest put a premium on this work, but it may have nothing whatever to do with the nature of form, since the evidence is often to be found in microscopic details or other differentiæ of no æsthetic importance. Work in iconography, the religious and other symbolism of certain works of art, though often of high importance as general knowledge, may also pass entirely over æsthetic qualities.

The great mass of work in art history is highly specialized, has no relation to the psychology of creation or appreciation, is dogmatic and conventional in standards of value, and is pervaded by a general air of dull pedantry and remoteness from life. The common fear in university circles of being thought "unscholarly" and "unsound" leads to a timid restriction to unchallengeable facts; thus to an avoidance of central critical and æsthetic issues. In the history of literature, as pursued in university research, the same heavy atmosphere of small pedantic facts exists. Students are too rarely encouraged to try original criticism or unusual modes of selecting and organizing data for study: they must summarize the life and works of trivial forgotten writers, or trace the history of some linguistic detail.

Obviously any history that is to include the facts of æsthetic importance must be based on much direct analysis of works of art, and on the study of general form-types. If the critic is primarily a historian, however, he will pay special attention to the chronological order of their production. He will try to trace the bit-by-bit growth of various types; to follow gradual or sudden shifts of emphasis; the decline and disappearance of a given quality, and its later recurrence in a new context; the gradual diffusion of a great man's influence through the work of his successors. He will constantly be estimating the extent of a man's originality: what

he received from different sources, what he added that had never appeared in art before, if only a new combination of old elements; how he developed or attenuated certain qualities of his predecessors.

The selection of what is important in the past can never be done once and for all, in any branch of history. The entire work of many artists (El Greco, for instance) has been omitted from the histories of one generation only to be emphasized in the next. Constant revaluation goes on, as in the recent tendency to exalt the archaic Greek, early Renaissance and other primitives. But one can make, or fail to make, a persistent effort towards objectivity, through giving specific demonstrable reasons for one's choices and judgments. By comparison with some other branches of history, that of art is unusually fortunate in this respect: that so large a part of its subject-matter is still extant and observable. Instead of being forced to conjectural reconstructions of what may have happened, it can proceed, like the history of philosophy, to the tracing of genetic sequences within the phenomena spread out before it.

One constant danger is the tendency to oversimplify the past by reducing it to regular courses, to "laws," "rhythms" and "philosophies" of history. One should be especially wary, in these days, of reading too comprehensive evolutions and progresses into past art. Aside from the question of value, one must not suppose that all changes are continuous, or that there is any general tendency toward increasing complexity of form. The historian will find particular developments, such as the growth in Renaissance painting of the ability to represent solid objects in deep space. But he must not assume that the growth was steady, or that a later picture—say by Botticelli—is necessarily more developed along that line than an earlier one—say by Giotto. He will find many individual forms merging in the work of some synthesizing genius like Dante or Titian; but he will also find the later splitting apart of such a complex by narrower specialists who follow up only one of its elements. He will find moves toward intricacy, and simultaneous moves by other artists toward bare, austere simplicity. If there is any definite controlling tendency in the history of art, it has not yet been found.

The possible influence of environment on art has been a favorite theme of historians since Taine, and many plausible speculations about it have been made. But until much more is known than at present about the history of form, no theorizing can be very reliable about its relations with other types of phenomena. *A priori,* the idea of constant mutual influence between art and its environment seems highly probable. "Art," we say confidently, "is always the expression of its age." As long as we look chiefly at the subject-matter of art, and the uses to which it is put, the influence is quite obvious; but it is less so as we come to emphasize differences in form. Was Cézanne's interest in planes and masses a result, as Elie Faure suggests, of the topography and atmosphere of Provence? The notion is seductive; but it grows dubious when tested with a little elementary logic. How many artists have lived in very different climates, yet also emphasized planes and masses? How many have lived in similar crystal-clear, mountainous climates, yet emphasized something else? The answer to both is legion.

At present there is less pressing need for such imaginative flights than for patient description of observable genetic sequences. We need especially a new sort of history-writing which will not be for independent reading, but for reading in the presence of works of art, or in as close proximity to a direct experience of them as possible. We need historical guidebooks, which will say: "If you want to follow the history of such-and-such a tendency (polytonality in modern music, for example) go first to this composition, and listen especially to this and that parts of it. Then go to this other composition, and observe a similar quality, but more marked and dominant in the whole form. Then to this third, and so on, noting what happens in each case to the quality you started with: how it develops, declines, and appears in new contexts." Such a type of art history could become of practical importance for appreciation, for criticism, and hence for æsthetics.

Questionnaires for Analysis

Like other instruments, questionnaires can be used or misused. One way of misusing them is to ask foolish questions of persons who do not wish to be bothered answering

them. Another is to publish statistical tabulations of a few answers in the belief that complicated problems are thereby settled.

For certain purposes, however, a questionnaire can be a very useful device. There is great need in the study of art for some way of getting people to look at the same objects, at the same parts of those objects, and to consider definite issues, one at a time, as they do so. A typical vice of æsthetic observation and discussion (from a scientific standpoint) is their tendency to wander aimlessly, and to confuse issues.

There is need also for some way of helping a beginner to get started on the process of analyzing and describing forms. If he is asked at once to analyze a given work of art, he is pretty sure to be lost in bewilderment. He gets only a blurred total effect, with some two or three conspicuous details standing out unrelatedly; a pleasing tune or color; an exciting incident. He has no idea of how to begin looking for the main outlines of structure.

One way to help him, of course, is to tell him, orally or in print, just what to look for, and to put the words in his mouth. A little of this may be indispensable when he is entirely inexperienced. But it runs the serious risk of destroying his independence, giving him habits of conformity, and making him think he sees and feels what he actually does not. Any comments or criticisms thus obtained are of little value as data for æsthetic generalization.

In view of this fact, some writers [6] have taken a position of extreme scepticism as to the value of any educational methods, or even criticism, as means of getting people to appreciate art. The problem is not peculiar to art, however, and no such complete abandonment of the task is necessary. It exists wherever education seeks to further spontaneous growth of mental powers, rather than to impart a fixed skill or to secure obedience. It is the universal problem of imparting the social heritage, which includes tested general ways of organizing individual conduct, without directing choices too specifically.

The questionnaire is proposed as one means to this end, not only for educating students, but also for coördinating critical research among experts. The general principle would be to provide the individual with lists of questions, suggesting

specific possible qualities and modes of organizing form, which he can take up to any given work of art. There he can ask himself whether some of these possibilities exist in the case before him. He would, it goes without saying, be under no obligation to answer yes or no, or to choose among the possibilities suggested. He would be likely to find in every case qualities not mentioned by his questionnaire, and could recognize and describe them in fresh ways. Each question would be a hypothesis and no more. But it would perform the service of directing his attention for the moment to some particular locus, where, if the fact suggested were not found, some other significant fact within the same locus might be discovered. Even the absence of facts common in other works would be significant. He would thus be aided in trying, one after the other, various modes of perceiving and describing which have proven useful in past cases, but which, without the present definite suggestion, might not occur to him. His eyes might thus be opened to important relations within the form which he would otherwise miss. If he found the case highly unusual, he would at least have taken the first crucial step toward piercing the fog, a separate attention to various parts; and he could go on more steadily toward singling out its unique peculiarities.

The use of questionnaires in art study, as in other subjects, is of course nothing new; but it has never been sufficiently developed in an experimental spirit. Rather than give a sample list of questions, which space forbids, it may be well to consider some ways in which anyone can pursue the method for himself.

In the first place, it is well to take advantage of past experience as to the usual main divisions or factors in a work of art. Thus, for the analysis of music, a questionnaire might be divided into the familiar headings of melody, harmony, rhythm and tempo, counterpoint, timbre and orchestration, programmatic or expressive qualities, and so on. One for painting might be divided into line, light and dark, color, mass and deep space; one for sculpture into line, plane and surface, mass, and (for occasional cases) color; one for verse into the sound of words (including meter, rhythm, rhyme, alliteration and so on), the suggestive and emotive effects of words, imagery, descriptive and narrative elements, exposition

and reasoning. There is no necessary grouping or sequence, and other modes of approach will suggest themselves in practice.

Each separate detail distinguished under these headings could be approached in different ways. What is its immediate sensuous effect when viewed apart from its context? (A bright, dull, rich or barren spot of color; a reedy, brassy or mellifluous tone, etc.) How is it interrelated with others under the same heading? (For example, take one melody with others as part of a regular pattern of theme-recurrence. One would mention how it is varied elsewhere, and contrasted with other main themes. Attention should be given to its part in small subordinate complexes, and to the part of each in the whole.) What representative or expressive significance has it? (Does it suggest some object, feeling or idea in the outside world? If so what, and how realistically? As literal imitation, or with some selection, intensification or distortion?) What does it owe to the work of other artists? (In what ways is it reminiscent, in what original? How are old qualities changed, developed, strengthened, weakened?) After so scrutinizing each factor in detail, the final and not least important step is to ask how smoothly all fit together to produce a coöperative effect. This would include the relation of the various main factors in design to each other (melody, harmony, etc.) and the relation of these to the representative and expressive effects.

As we have seen, æsthetic qualities can not be described in purely objective terms, and the finding of apt critical terms is no easy task. The questionnaire could offer aid by inserting, after each question, lists of critical words and phrases which might serve as approximate answers to it. Of a single melodic theme, for example, one might ask if it were crisp, jerky, spasmodic, suave, martial, exhilarating, caressing, soothing, harsh, monotonous, lilting, tumbling, wild, firm, decisive, wavering, tender, stately, grave, funereal, quaint, vigorous, voluptuous, pastoral. To consider each of these words for a second in reference to any given melody (for example the 'cello theme at the beginning of Schubert's Unfinished Symphony) may aid the student not only to verbal expression, but to feeling the distinctive quality of the thing as apart from its context. If none of the words suggested

seems quite apt, another, or two or three others taken together, may come to mind.

There is no difficulty in making lists of such critical terms; it is rather in limiting oneself to those which will be most suggestive, and keeping the list down to practicable length. For that reason, rather than to take them wholesale from a dictionary or thesaurus, it would be better to take them from actual art criticism. Whenever a reader encounters an especially vivid bit of characterization, he can make a note of it, and to what it is applied. To quote at random from Roger Fry on El Greco: [7] "The extraordinary emphasis and amplitude of the rhythm, which thus gathers up into a few sweeping diagonals the whole complex of the vision"—"the melodramatic expression of a high-pitched religiosity"—"voluminous and massive garments which under the stress of an emphatic pose take heavy folds."

First of all, one should take such comments directly to the pictures they refer to, and see if they are justified. By that act the words will lose a little of their abstractness, and become symbols for concrete memory-images. Then one can include them, briefly, in a questionnaire, as possible modes of organization, of emotional expression, of treating drapery in a painting. Whenever one later encounters other ways of treating similar themes, and reads or thinks of words to describe them, one can enter these words also under the same headings. Gradually there will grow up a varied list of form-types which one has experienced, arranged as a questionnaire under headings and sub-headings referring to the chief common factors in art. As it gets unwieldy, it can be cut down, or divided into separate questionnaires for various kinds of art.

At the same time, one can also be listing under the name of each form-type the names of particular works of art in which one has found it especially manifest. For example, under some (not all) of the qualities just mentioned one can include the works of Baroque painters and sculptors after El Greco.

The way to use such a questionnaire is to read it in the presence of one work of art after another, of the general type with which it deals. Answers can then be written to those questions which seem most relevant to the object at hand;

the others disregarded; and additional comments written which the questions did not cover. It is best to hear, read or see the work of art first with an open mind, rather casually and without specific questioning; to begin analysis only after the first total effect has taken place.

For the visual and literary arts, there is no special difficulty met with in running through a questionnaire with the object beside one. For music, there are practical advantages in the use of mechanical reproducers, such as the phonograph and player-piano. Although lacking in tone-quality and personal touch, they are suited to form-analysis in that one can repeat a composition again and again, stop it in the middle and repeat a phrase, put on another record and play a comparable phrase in a different piece, and so on. But before and after analysis, one should hear the piece well performed.

An obvious question is whether it might not become very tedious to run through a long list of questions for each case. Some amount of taking pains is unavoidable if one's aim is intensive study. For beginners, it is usually necessary to go through an entire questionnaire several times, in regard to various objects. But as the work progresses, short-cuts become possible. As one becomes quicker at seizing the main distinctive qualities of an object, one can pay attention largely to questions related to those, dispensing with the others and adapting the order of analysis to fit the case. For a picture which obviously makes no attempt at linear pattern, for example, one can at once rule out all groups of detailed questions under this heading. Finally, as far as informal appreciation is the aim, all questionnaires can be dispensed with, as one learns how to go to work at analyzing form.

No few definite modes of approach to works of art should ever become habitual, however. For that reason a long questionnaire, asking many varied questions, is better at the start than a small one, since it runs less risk of directing answers. The danger of all suggestions, influences, models and standards to independence of thought is in inverse proportion to their number and variety; the risk lies in exposing oneself, not to too many, but to too few. There is little danger and much stimulation in being under the influence of a teacher

with strong opinions and preferences, if he is not one's only teacher. For that reason art education should not fear to direct the student's attention in specific ways, provided it directs him in enough different ways, so that he is forced to make his own choices. It would be undesirable for any few questionnaires ever to become standardized for art study. Rather every teacher and every student should make his own, and his own list of answers, as he goes along. Each questionnaire should be a selective summary of what one has already perceived in art, so organized as to make it readily applicable as a set of hypotheses for the future.

Comparison of Findings

Æsthetics in its present situation could profit from the example of Socrates. When faced by an apparently irreconcilable diversity of opinion on all subjects, analogous to that which now prevails on æsthetic value, he made a step toward science by comparing the opinions of his contemporaries, to see what possible basis of agreement might exist. Modern science has involved a constant checking up of results by various workers in the same subject. Carried over into æsthetics, this would suggest a systematic comparison of notes on the results of individual experiences in art. Its aim would be to discover more specifically how people agree and how they vary in æsthetic responses and critical appraisals. It should be carried on in a purely descriptive spirit, without any disposition to impose one's opinion or mode of action on others. It should involve no fixed assumptions as to the correctness of any particular view, or the superior authority of any one's taste. Neither should it assume that the majority is right, or that universal agreement on a proposition necessarily makes it true. It should be suspicious of apparent uniformities which may cover subtle variations, but take note of the former in so far as they appear.

Here again a practicable line of inquiry has been held up by imaginary theoretical obstacles. There has been much unwarranted mystification in æsthetics about the "uniqueness" and "ineffability" of each momentary experience. This attitude is partly justified as opposed to past hasty attempts to reduce all types of æsthetic response to one common denominator, such as "pleasure of the senses", or to settle ques-

tions of value by vote. Every individual's experience, and every moment in it, is no doubt different in some respects from every other, just as all oak-trees are a little different. But there is no ground for assuming that the diversity between individuals is absolute, or for failing to study what resemblances apparently exist.

If there is any physiological evidence, it is to confirm the presumption of resemblances, for the nervous and glandular mechanisms which are said to function in affective behavior seem to have a certain basic similarity from person to person, as do human eyes. They may be vastly more variable, but the difference is one of degree, and some approximate uniformities may therefore conceivably be charted. If there is any evidence from crowd behavior, it is that the emotions and preferences of the public are remarkably similar. Many artists and connoisseurs, to be sure, place themselves in an altogether different category: each is sure that no one ever had feelings like his, or so exquisitely sensitive. Yet they use much the same language, flock in gatherings of their kind and after the same new idols, with gregarious uniformity.

It is possible, of course, for two persons to agree entirely on a certain verbal criticism and yet be having very different inward experiences. In this fact lies the main force of the common contention that no objective study of æsthetic experiences is possible. Yet the same contention may be made about the simplest sensory response, a "secondary" quality such as "red," as well as about a "tertiary" quality such as "graceful". As students in elementary philosophy are taught, we can never be absolutely sure that our experience in seeing a red rose is anything like another person's in a similar situation. He might be seeing some color totally beyond our ken, but if he spoke and acted in regard to it as we do toward our sensation, nobody would ever be the wiser. Yet that ultimate doubt is of no practical or scientific consequence whatever. We go on comparing the colors of things and working out standard color-charts in relation to pigments and light-rays with high scientific reliability.

Are we justified in assuming that the "tertiary" qualities or affective responses are altogether different in kind? May it not be that some are almost as regularly predictable as some sensory responses? The line between simple perception

and emotional apprehension is by no means easy to draw. Where would it come, for example, as between a red, a brilliant red, a dazzling, a glowing, a garish and a warm or cheerful red? Can not certain tastes and odors be predicted, under ordinary conditions, as "delicious," "fragrant," "nauseous" or "bitter"? Even in the more complex and subtle arts, it may be possible to agree on more affective or evaluative critical terms than has been supposed: that a certain melody is "gay and sprightly"; or a certain tragedy "majestic, somber and inevitable."

All literature, all civilized intercourse, and even the continuity of each individual self, rest on the practical possibility of comparing perceptive, emotional and evaluative experiences, of classifying them roughly under general concepts, and expressing them approximately in words. No theoretical quibbles should bar us from the task of making that comparison more precise and reliable.

The necessary means to that end is a systematic, coöperative study of the application of specific critical terms to specific works of art. What printed interchange of views now goes on among critics is for the most part casual and wandering, like a café-table conversation; issues are not clearly joined, or continuously followed up. What is needed instead is a detailed written record by each individual of his experience with, and critical judgment of, a great variety of works of art that are accessible to the public. Mr. Roger Fry has expressed a very sensible attitude for each experimenter to take. He should watch, "with such honesty and detachment as he can command, his own reactions," then "lay his cards on the table and invite the reader to see whether his own reactions in any given case coincide." [8]

To be most effective, that comparison of reactions must be made systematic. Therein lies an opportunity for university and other centers of organized research. The answering of detailed questionnaires by many critics, in reference to the same works of art, would be an effective means to definite point-by-point comparison. From an increasing number of such records, properly tabulated, an increasingly reliable estimate could be formed of the agreement and disagreement in critical responses to any given case.

This work should be supplemented by research in col-

lating critical comments by writers old and modern on the same works of art, artists and schools. The whole body of past criticism, and much other literature as well, is a treasure-house of recorded experiences with art, but it needs much coördination to bring out its meaning clearly. A practicable way to begin would be to select some well-known work of art—the Parthenon, Hamlet, the Fifth Symphony, the Laocoön, Mona Lisa—then, disregarding one's own opinion in the matter, simply bring together the various past comments upon it which seemed most significant. If a work of art has changed through age (the Mona Lisa, for instance) that fact should of course be considered as related to disagreements in criticism. General comments on the work as a whole should be placed side by side, and those on each separate part or aspect of it. This would supplement a line of research already suggested: that of tracing through critical literature the definitions and applications of a given critical term such as "romantic," "sublime" or "decadent."

The suggestions gained through these various lines of study should again be put into practice, and not rest idle in books or archives. Each clew to the opinions and behavior of some one else is a suggestion for use in one's own activity. Each individual can remain independent, true to the basic dictates of his own character, and yet profit to some extent by the experience of others. If that experience is made easily accessible, and expressed with reference to specific works of art, one can go again to these objects with an open mind, to see if one missed something of importance before, or whether for any reason one can voluntarily revise an earlier criticism. Thus observation, hypothesis, comparing notes, renewed observation and revision of ideas can be never-ending phases of a single coöperative process.

Through directing such a process æsthetics might hope, not to attain any certain or exact solutions to its old problems, but to accelerate a little the natural evolution by which beliefs, in art as elsewhere, lose their local, ephemeral character, and become tested products of social experience.

CHAPTER III

ÆSTHETIC PSYCHOLOGY

Its Task in General

WHERE the study of form is mainly concerned with describing works of art as directly perceived and felt, psychology is concerned also with locating them in a larger setting of human behavior. It is interested in learning what forces in the artist's personality led up to their creation. It is interested in understanding the processes of appreciation more clearly than a person can who is giving his main attention to the objects before him and to the choice of appropriate critical terms. It is interested in discovering the relation of these creative and appreciative processes to other phases of human experience than those of art, and to the structure of the human organism.

In generalizing, the æsthetic psychologist will look for recurrences and types, not so much in the forms of art as in the experiences related to them. He will look for similarities of psychic response among varied contexts: for example, the occurrence of a certain characteristic feeling in the presence of art-works very different in form, and in other situations quite unconnected with art. Conversely, he will note also how an identical work of art can arouse very different responses in different persons, or in the same person at different times. He will try to trace such phenomena to their causes in the human mechanism, and to individual differences in physique, character, special training and temporary condition.

He will try to express his findings in terms of general psychology when possible, as well as in those of criticism, and to link them with such notions as perception, habit, learning, desire and emotion. But at the same time he should bear in mind that those concepts as defined by psychology may be distorted through lack of knowledge about the very phenomena with which he is dealing. So he should treat them

as suggestions, but be free to redefine them or form new ones as he goes along. He should not merely apply the theories worked out in other branches of psychology, but contribute to their development, and to the progress of that science as a whole toward a fuller understanding of the human mind. General psychology has not hitherto penetrated far into the details of the subtler emotional and imaginative phenomena, so æsthetics can not learn much about them from that source. Rather it must be the other way around: if the æsthetician reports accurately about his own field, he can bring much information of value to the general psychologist.

The most important contribution of modern psychology to æsthetics has been an indirect and general one: a strengthening of the naturalistic world-view by showing in detail how mental phenomena can be included within it. The result is a changing attitude toward art and æsthetic experience in general: a growing faith that they can sometime be understood in detail as continuous phases of the natural order revealed by science, without the need of resorting to supernatural and transcendental explanations. The rapid success of experimental psychology in adapting scientific method to a study of complex and variable phenomena, once considered hopelessly beyond the reach of science, has encouraged the belief that not even the most subtle phenomena of art and emotional life can remain forever mysterious. To take the place of the vague dogmas of idealistic æsthetics, there is an increasing demand for a naturalistic answer to every problem encountered in the arts.

Psychology also offers to æsthetics new conceptions of many particular mental mechanisms which seem to be involved in æsthetic experience. Some of these, such as "empathy," [1] have been explicitly applied to art, with results less all-explanatory than were at first claimed; but with enough success to make them worth considering in certain types of case. Equally useful is the light shed on many familiar mechanisms, such as habit, emotion and the learning process, which seem to operate in æsthetic quite as much as in other kinds of behavior. Practically all of the chief recent developments in psychology seem to have potential bearings on æsthetics, although it is too early in many cases to see exactly what those bearings may be.

Suggestions from Laboratory Psychology

Physiological psychology, for example, is making fast progress toward a localization of the nerve centers responsible for various mental functions. In so far as this describes the course of a sensory stimulus through perceptive and affective centers, and such basic mechanisms as rhythm and equilibrium, it may help us to understand, for example, what happens when we respond to vigorous martial or dance music. Most of the responses in art, however, are so complex as to leave little hope that they can be physiologically plotted. The same attitude must be taken toward biochemical studies of emotion, which correlate various endocrine secretions with various emotional states. It is interesting to know that violent fear changes the sugar content of the blood, but to describe the chemistry of æsthetic emotion would seem hopelessly complex and not especially important. There may be more to be learned from the correlation of certain types of character with certain types of physique (including excessive or insufficient functioning of certain glands) which can help explain peculiar mental and emotional trends, including the production of and preference for certain types of art.

It is significant that Fechner's attempt at inductive study of æsthetics, in the seventies, bore more fruit in general psychology than it did along the lines he anticipated. His work in measuring sensory responses and experimenting with various stimuli was one of the pioneer steps toward laboratory psychology, which by 1890 was assuming the proportions of a new science. It has never been able to deal very successfully with volition and emotion, but has greatly illuminated the processes of perception, recognition and memory, which are also directly and constantly involved in æsthetic experience.

Much is to be hoped for from further experiment on the border-line between simple perception and feeling, such as the effects of brilliance and richness of color, of various combinations of hue and types of linear pattern; of concord, discord and varying rhythm in musical tones, and so on.[2] The use of exact laboratory methods in æsthetics as far as they will go is altogether desirable, provided too much is not

expected from them, and provided they are supplemented by other approaches.

They labor under grave difficulties, however. It should be remembered, for example, that the effect of any simple percept by itself may be quite different from its effect in a larger form. The effect of two strips of colored paper side by side, or of a simple chord progression, is no trustworthy sign of what their effects would be in works of art. Nor can one infer from the physically measured ratios of light-waves and sound-waves exactly what effects of harmony or conflict they will produce; for too many psychic factors complicate the situation. These are serious obstacles to all generalizations, based on physics, about the harmony of colors or of tones. It should also be remembered that laboratory conditions are not apt to be favorable to any full and spontaneous emotional experience. Still another difficulty is that tests demanding description of an object or an experience assume a considerable degree of skill in verbal expression. As pointed out in the previous chapter, verbal difficulties are not a complete barrier to æsthetic research. But they are a complicating factor to be taken into account. They are a necessary but distorting medium between the experimenter and the person he is testing, unless that person is himself.

From Genetic and Comparative Psychology

The recent demise of the instinct theory (for the present at least) is no great loss to æsthetics. It was not especially helpful to try to analyze æsthetic experience into the workings of a list of unitary "inborn drives," such as hunger, sex, shelter, mastery, gregariousness, pugnacity and the rest. If genetically traceable to these antecedents, it exhibits them in such modified form that their original identity is lost. The emphasis of the recent *Gestalt* school on total unified configurations in behavior, rather than on isolated factors, is a much more promising approach to æsthetics. In such concepts as "configuration" and "redintegration," we are coming much closer to the apparent nature of a complex æsthetic response to a total form.

Aside from special theories, the teachings of genetic and comparative psychology have already had a far-reaching influence on æsthetics. They have shown the origins of civil-

ized mentality in that of prehuman and primitive ancestors, and the present resemblance of much human thinking to that of lower animals. By thus locating the human mind in an evolutionary process, they have confirmed the hypothesis of the rise of art out of primary organic functioning, and its continuity with the rest of human behavior. Anthropology, by showing the past variation in standards of artistic value and the relations of art to other social activities, such as religion, tends to strengthen a relativistic theory of æsthetic values. It leads to the belief that standards of beauty, tendencies to produce and admire certain kinds of art, are not fixed and universal, but products partly of varying social environments, and partly of individual differences. Psychology still further corroborates this view by explaining the general mechanisms by which habits of preference are formed.

One of the main achievements of recent psychology has been its investigation of the learning process: not the mere memorizing of facts and theories, but the acquirement of habits, and of modes of surmounting difficulties. Part of this study has been devoted to the lower, sub-rational levels of learning (in both animals and man) and part to the level of intelligent choice and reasoning. At the former level its chief result has been the principle of the conditioned reflex. At birth, an animal is capable of responding to only a few sorts of stimulus, which call forth automatic movements; but if one of these stimuli is frequently accompanied by a different one, the organism gradually learns to respond to the second alone, as originally it would have responded only if the first were present. This mode of learning, which occurs in very simple forms of life, has been said to be fundamental also to human behavior, from infancy onward, and to be the organic basis of inductive reasoning. It suggests that the formation of habits and standards of æsthetic preference could be similarly studied, through observing and experimenting with the responses of children to æsthetic stimuli under various accompanying circumstances.

Of equal or greater importance to æsthetics, since it deals directly with the higher levels of culture, has been the study of the processes of reasoning, intelligent learning and valuation. Here the general drift of opinion has been vol-

untaristic, anti-intellectualistic: which is to say that these processes are no longer regarded as purely logical, abstract and formal, but as directed by organic impulse, influenced by the "will to believe" even when apparently rational. It means, too, that reasoning is interpreted as a phase of organic functioning; as an outgrowth of the power of adjusting conflicts of impulse which the higher animals have developed in the course of evolution. Intelligent choice is conceived as a process of trying to foresee the results of various possible alternatives in action. This trend in psychology has gone along with the pragmatic doctrine that scientific and philosophic thinking, including moral and æsthetic valuation, are not only practical in origin but should be more consciously devoted to practical ends; should give more recognition to the irregular and unintellectual elements in experience; and more effort to tracing the consequences to which certain beliefs lead in action.[8] The present book applies some of these ideas to the field of æsthetics.

From Educational Psychology

Study of the learning process at its higher levels has naturally been closely bound up with educational theory and practice. Here again there have been movements significant to æsthetics. One is an increasing emphasis on the Rousseau tradition of freedom, and on Schiller's doctrine of the connection between art and play. This has led to an effort to stimulate original experimentation and the play spirit in art-study. It has at times been characterized by an extreme exaltation of "free expression," assailing all directive influence as harmful; at times by the more moderate ideal of intelligent growth.

Also of possible bearing on æsthetics is the recent development of educational tests and measurements. The detailed study of individual differences is a step away from the common tendency of psychologists to oversimplify mental phenomena, to reduce all to rule, and overlook variations. Any approach to æsthetic psychology should be extremely hesitant about affirming universal regularities, and sensitive to subtle variations from person to person and moment to moment. Unfortunately, even the measurement of individual differences can be oversimplified, by labeling a person as

of a certain type (e.g., introvert or extravert) or as of a certain total intelligence quotient, and neglecting his further peculiarities.

Recent attempts to adapt mental tests to the study of æsthetic phenomena have tended to perpetuate the chief fault of the Fechner tradition: its over-emphasis on quantitative measurements. A frequent device is to present a series of examples of works of art to a number of persons, to be arranged in order of preference. One trouble with such an approach is that an apparent agreement on general relative merit may cover a great difference in inward responses and modes of valuation. Another is that the psychologist's own assumption as to the relative merit of the examples may be questionable, so that conformity with it is no sure criterion of superior taste. The tendency is to make the scale of values, say in a test of drawing ability, accord with conventional academic ideas of good drawing; the neater and more exactly representative being unjustifiably assumed to be always better. Examples presented for choice are usually not whole original works of art, but reproductions and excerpts, black and white photographs of paintings, and phrases culled from musical compositions. Thus isolated, these fragments are apt to lose all their original significance. In "spoiling" them for test purposes, one may be merely changing them into other themes, less smooth and concordant perhaps, which would be equally good in some other musical context. All statistics resulting from such dubious "tests" are less scientific than they sound.

There is need in this type of research for more careful study of what a given test assumes and what it really measures; for more use of whole original works of art; more contact with art criticism; more recognition of specific variable factors involved in the behavior under observation; more caution in interpreting statistical results. With these, the method of controlled experiment is capable of indefinite and fruitful extension in æsthetics. One of its most promising phases is the attempt to correlate preferences with different age and educational groups, and with different degrees of artistic training.[4] Statistical correlation is the greatest achievement of scientific method for dealing with large masses of complex and variable data; and its general prin-

ciples can be used to guide inductive study even where numerical conclusions are unreliable. In other fields than art, mental tests have been worked out with increasing reliability, and highly useful results. With a proper understanding of the peculiarities of æsthetic phenomena, there is no prophesying how far they may be able to go in this field also.

From Psychoanalysis

Up to the present, the doctrines of Freud, Jung, Adler and Stekel have been less far-reaching in the interpretation of art than they were expected to be. The search for Œdipus complexes, erotic symbolism and unconscious wish-fulfillments has been more successful in literature than elsewhere, especially in interpreting primitive myths, fairy-tales and poetic imagery, and in analyzing the motivation of characters in fiction.[5] In the visual arts and in music it has met with little success. A number of pretentious efforts to psychoanalyze the arts have been disappointingly far-fetched. When plausible in explaining details of subject-matter, or the character of an artist, they usually fall short of explaining those distinctive qualities of form that make the artist and his work æsthetically important.

It is hard to abandon all hope of progress along this line, however, since the phenomena studied by psychoanalysis appear on the whole to be so closely related to those of æsthetics. It is the only branch of psychology which tries to observe and explain in detail specific affective and volitional states in the individual, as subtle, varied and intricate as those encountered in the arts. It studies strange illusions, images, symbols, fantasies, dreams, vague but intense emotions, ecstasies, fascinations, loves and hates, and conflicting attitudes which combine both attraction and repulsion. It studies the unconscious projection of emotional states on other persons and objects. All of these types of phenomena have been said to occur in æsthetic experience, in both its creative and appreciative phases. The very existence of some of them was almost unrealized a generation ago, although we see now that they are enigmatically dramatized in the writings of a Blake or a Dostoyevsky. Yet psychoanalysis has made a noteworthy effort to observe and describe them in clear scientific terms. It has advanced plausible if not entirely adequate theories of

their causation, through its ideas of repressed conflict, the libido, and the sense of inferiority. Going further, it has suggested modes of control, and in some cases put them successfully into practice. Its technique of exploring the depths of imaginative life, its bold attempt to adapt scientific method to a study of phenomena apparently beyond the reach of science, are worthy of respectful consideration by the æsthetic psychologist.

One reason for its present inadequacy in the field of æsthetics, perhaps, is its emphasis on the psychopathic forms of the phenomena it studies. This is due to its origin as an outgrowth of medicine, and to the therapeutic character of its practical activities. It is also due to the fact that in a neurotic personality mechanisms appear in hypertrophied and therefore obvious forms, which in a normal one are slighter and more completely hidden. This preoccupation with the anxious and painful results of internal conflict has given a questionable trend to its general theorizing. It has seemed to imply, at times, that all dreams and fantasies, all mysterious desires and emotions, are morbid, and should be destroyed by bringing them into the cold light of day. Some illusions and fantasies are vital to the æsthetic imagination, and in regarding them all with this hygienic antipathy, the psychoanalyst tends to disparage something very precious to art. In approaching its phenomena with such ethical and other evaluative prejudices, psychoanalysis fails to be scientifically objective and dispassionate. If its illuminating method is to be successfully carried over into æsthetics, we must learn to explore the unconscious processes of relatively normal persons, without overworking a few simple explanations, and without preconceptions as to what ought to be done. We must recognize at least a possibility that some kinds of unanalyzed fantasy, some kinds of unconscious conflict and emotional projection, are and ought to be cultivated rather than destroyed in art and life, so long as they are kept within general limits of control.

From Behaviorism

This word has had a varied history, and is rather ambiguous in consequence. A generation ago, it was used to characterize the general movement toward induction and labora-

tory experiment, which was superseding the old faculty psychology based on introspection and metaphysics. Now it has become associated with a special doctrine within that inductive approach, which goes to extremes in denying all scientific value to introspection, insisting that psychology be based entirely on data derived from observation of the overt actions of organisms, and attempting to reduce higher thought processes to muscular movements. This extreme doctrine has few supporters, but it has achieved great publicity, and other approaches to psychology seem to feel obliged to defend themselves against the charge that they are "subjective" and therefore unscientific.

In answer to this doctrine, Bertrand Russell has pointed out that observation of the movements of animals is a process by no means free from "subjectivity," or from liability to error because of the human and personal limitations of the observer. He has pointed out also that self-observation, if carefully controlled and checked up, can be made to yield significant and not entirely unreliable data.[6] This does not mean a return to the old implicit faith in introspection; we now realize its great liability to error through self-deception. But its data are not to be completely ignored. One can, if conscious of the dangers, try to guard against them and adopt a fairly objective attitude, even in observing one's own subjective percepts, feelings and modes of inference. By comparing our findings, we can still further test their reliability; in short, adopt an experimentally inductive method in self-observation.

The æsthetic psychologist need have no fear that in observing his own reactions, or asking other persons about theirs, he is necessarily stepping outside the pale of science. Much of the best in modern psychology, especially that dealing with the higher thought processes, has arisen partly out of judicious self-observation, combined with ways of inferring the thought-processes of others which would never satisfy a rigorous behaviorist.

On its constructive side, behaviorism (in the broad sense) has much of value to suggest to æsthetics. It stresses the importance of observing the outward actions of people, rather than believing implicitly what they say about themselves. From a sense of duty, or to appear cultured, people often

say and even believe they are getting tremendous enjoyment from the fine arts; whereas, to quote Mr. Leo Stein, "One could empty almost any art gallery with a nice thrilling accident enacted before its doors." What people devote time and effort to, sacrifice other pleasures for, what books they read and what plays they see when no "highbrow" acquaintances are looking on, may be a much truer index of their real tastes than what they profess to like. The votes of college seniors on their favorite authors are not a good indication of what books and magazines will be found in their rooms. Observation of how people of various types actually spend their leisure time and surplus money might afford some illuminating data to æsthetic psychology. In addition, something can perhaps be accomplished through observing the actions of persons in the presence of works of art,[7] although these are extremely dubious clews to what is going on inside their minds.

What the laboratory psychologist tends to forget is that spoken and written words are themselves a form of behavior, and a form which can be studied as objectively as the fumblings of animals in a cage. Expressed criticisms of works of art, and attempts to put inward experiences into words, are not merely failures to describe something else; they are themselves phenomena rather closely related to æsthetic experience. They may be quite as significant a clew to the mental processes behind them as the monkey's piling up of boxes is to his mentality. Any conception of human behavior which omits the writing of poems and systems of philosophy, the playing of violins and the carving of statues, the attempt to appraise these things in logical and intelligible words; or any psychology which fails to take account of them, is too narrow to deserve the name.

It is this narrow-mindedness in some natural scientists which gives continued strength to the mystic and idealist, with their talk of a "subjective" world, and of realities and values which can not be reduced to material terms. A philosophy based on such distorted science will rightly appear one-sided and demeaning to those gifted with more sensitive intuitions. While it fails to correct itself, it will be distrusted; it will need supplementing at the hands of religious, metaphysical and poetic imagination. But a total world-view thus built

of maladjusted and conflicting parts can never be fully rational. It remains for science itself to broaden its outlook. Without abandoning its experimental approach, or its conception of the physical basis of things, it can go on to adapt that approach to a more sympathetic study of what Santayana has called their "ideal fulfillments."

The Production of Art

Æsthetics should make use of the methods of general psychology as far as they will go. But in addition, it should endeavor to further the movement already begun in criticism toward a clearer understanding of the psychic factors involved in the creation and appreciation of art.

In regard to production, there is a wealth of material in biography, memoirs, artists' notes and sketches that has never been properly coördinated. A possible line of research would be to go through the biographies and autobiographies of artists (of minor as well as major importance), and through miscellaneous memoirs about them. The information derived should be classified for ready comparison under various headings. For example, it would be significant to know more about their general physical, nervous and mental condition. Among other uses, this would help test the popular theory that genius is allied to insanity. We should have more comparative data on their heredity, early environment and traits manifested; [8] their general education and culture; their special training and influences in art; their character and interests as shown in other activities and relations; their one-sidedness or versatility. We should know their aims and standards of value in so far as they tried to express them otherwise than in their chosen medium; their likes and dislikes in art; the extent of their tolerance and appreciation toward other artists. We should look for facts about their mode of procedure in creation; [9] their technical methods, materials and devices; their preliminary blocking-out of a composition; how much conscious and systematic plan they followed; how much they went ahead by undirected impulse, sudden intuition and inspiration; to what extent and how they criticized their own work; how much difficulty they had in realizing forms satisfactory to themselves; to what extent they followed explicit conventional rules and models; to what extent they were able

to conceive a work of art as a whole before expression; to what extent and how they revised their first conception in manipulating the medium.

All the above groups of data should be correlated with critical summaries of the forms which the artists produced, with the aim of finding whether certain types of psychic factor and condition tend to produce certain types of form. It should never be assumed in advance that any known peculiarity or motive in the artist will show itself in his work. There is great danger of reading such known facts into critical appraisal of the work itself. Firmly integrated products have come from personalities torn with internal conflict; important works from minds agitated over sordid trifles. An artist may create in spite of himself, or in spite of a part of himself; to escape from that part, or to correct it in imagination and transcend it through achievement.

Education for Creativeness

Potentially, the most valuable of all sources of knowledge about artistic creativeness is the field of art education. It can become so, however, only if a more experimental attitude is adopted in that field. Training in the practice and appreciation of every art, in so far as it can go beyond the imparting of a set skill for vocational aims, should be regarded as an opportunity to experiment with a variety of methods, and to note their results as psychological data. Experimental schools should try not one but many methods, from "free expression" to the various stricter types that have been followed in the craft-guilds and workshops of other days and other civilizations.

We know so little of the factors determining creative genius that it is impossible to say with confidence that any given method will stimulate it. Even "free expression" has not been an unqualified success along this line, after the first few years of childish interest. Genius has flowered from educational methods that would now be considered narrow and repressive in the extreme. Oftentimes it seems as though some cramping, irritating counter-force were necessary to urge it into animated reaction. We can not be sure that rationality, tolerance, catholicity of taste, lack of dogmatism —any of the aims now sought in general education—will be

more an advantage than a drawback in a given case. Perhaps the creative mind needs other educational methods than the appreciative. Perhaps, as often charged, our whole system of education in the arts, especially in colleges, is such as to make critics rather than artists. Perhaps education can have little effect one way or the other, and the appearance of creativeness will always be an unpredictable, uncontrollable miracle. Perhaps that quality can be influenced through eugenics; or through proper conditioning of reflexes in infancy, as the behaviorists believe. But we have not experimented enough with educational methods to give up hope that they may sometime become reliable means to the development of creative originality.

There is need especially for experiment with a middle course in art instruction, that would be less fearful of outside influence than the free expression method, and less narrowly rigid than the academic method. There is need for a way of imparting to students the social heritage of traditional forms, and trained experience in techniques, without determining the special trends which their activities shall take. This could be accomplished by placing within the student's easy reach a great variety of concrete examples of widely different forms of art, so that he might be stimulated by them, but forced to choose for himself which line he would follow up, or how he would try to select, combine and alter various forms. He should initiate all productive enterprises for himself; but if he came to a serious difficulty, or seemed to be settling into a stereotyped weakness, the teacher could bring to his attention some past examples of art that treated in other ways problems similar to his present one. This would of course require on the part of the teacher not only a persistently experimental attitude, but familiarity with the history of forms.[10]

This and other methods could be tried with different groups of students, selected and unselected; so that one could estimate their results for different types of persons, and in different arts and special activities.

From all the foregoing data, the psychologist should try to generalize on the factors involved in the creation of art: the more constant and the principal variations. He should go farther, and compare creativeness in art with that in other

lines, such as science, philosophy, religion and statesmanship; to see what capacities are limited to art and what transferable to other pursuits; what common and variable features characterize the power to organize new forms in different fields of activity.

Appreciation

The study of the heterogeneous group of phenomena denoted by this word has suffered from the usual tendency of æstheticians to rush into oversimple generalizations and arbitrary rules. Much effort has been spent in arguing that some one sort of experience is *the* æsthetic experience, as if there were only one; that all other ways of responding to art but the one prescribed are spurious, vulgar imitations.

Right or wrong, such pronouncements need backing up with more impartial observation of the facts than has ever taken place. Rather than to start out with an exclusive definition of what is *really* æsthetic experience, or a dictum as to how people *ought* to look at art, an experimental attitude would be to find out in what various ways they *do* look at art, and what the specific consequences are of each.

Our ordinary names for æsthetic experience are vague, and cover up many possible variations. "Appreciation" suggests conscious appraisal, a judgment of values; whereas one may "prize" and enjoy a work of art without attempting any judgment on it. "Contemplation" suggests an exclusively passive attitude, or a Platonic, intellectual knowledge of the good. "Enjoyment" suggests a definite thrill of delight, which is not always present in æsthetic experience. All of these words, and others to assist them, need precise redefinition through use in practice, as tools for distinguishing between actual experiences felt to be unlike.

Instead of arguing any question in the abstract, the experimenter should try to put it into action. Whenever he reads a description of some process or attitude said to be essential or common in æsthetic experience, let him try to live that process. Take for example Mr. H. D. Waley's theory: "I shall consider the process of dreaming, whether in reverie, natural sleep, or artificially induced trance-states, to be the prototype of all æsthetic experience. These states exhibit in the purest form what I select as the distinctive

features of the æsthetic experience, namely, an obstruction of the channels both of ratiocination and conation, together with a shifting of attention to the remaining elements of consciousness." [11] Here is one theory; others would differ, and deny that æsthetic experience is necessarily dreamy, or non-ratiocinative. Ogden, Richards and Wood have proposed the term "synæsthesis," to describe an equilibrium, with no tendency to action, which gives "free play to every impulse, with entire avoidance of frustration." [12]

As Mr. Waley remarks, the suppression of reasoning is not a thing that can be done at will, in a laboratory experiment, and no doubt synæsthesis also is a state to be hoped for rather than accomplished on demand. But there is nothing to prevent one from going about the enjoyment of art in an undirected, spontaneous way, then looking back in his more reflective moments to see if and when his experience has corresponded with the description. Having understood the concept, we can see if it works as an explanation of past events. Other attitudes can be assumed at will with fair success, after practice: such as ignoring subject-matter in a picture, and noticing only line, color and mass arrangements.

As far as the superior value of any particular attitude is concerned, one can get at the question for oneself only by trying various attitudes persistently, and appraising their consequences in terms of cumulative interest, richness, intensity, or whatever other criteria one chooses to employ. Here is another opportunity for art education, in its appreciative phase: to stimulate in students various ways of looking at or responding to a work of art; and to note the consequences, in terms of interest manifested, power to discriminate, effects on other studies, and so on.

In the study of appreciation, as well as in form-analysis, the questionnaire is of great potential utility. It can direct the observer's attention to one special phase of his own experience after another, and help him to gather specific, readily comparable data from other persons.[13] Much of the difficulty in describing subtle experiences is due to the fact, not that no adequate words exist, but that one cannot think of them; also to the fact that an experience may be too many-sided to describe all at once. If a man is asked how he feels when he listens to music, he will probably say that the ques-

tion is foolish and unanswerable. But if he hears for the first time Debussy's *Jardins sous la pluie,* without knowing its title, and is immediately asked if it suggested any visual images to him, he may have something definite to answer. Psychoanalysis has demonstrated the efficacy of specific, directed questioning in bringing out significant facts about inward mental processes, even though the person questioned does not understand their full significance.

Questions should as a rule refer to particular works of art, and be directed to throw light on whatever points are of interest to psychology: such as the amount of attention to associated ideas rather than to direct, full perception; of attempt at rational appraisal; of passive contemplation or "drowsy reverie"; of felt desire or tendency to act toward the object or something represented by it; of positive liking or disliking, pain, discomfort, boredom, fatigue, disgust, disapproval, soothing or exciting effect, empathy, expansiveness, felt physical rhythm or thrill, appeal of an erotic, religious or intellectual order, fixed or wavering attention and interest, ease of grasping the object as a whole—in short, to bring out whatever responses of interest to æsthetics are not included within a description of the object's form. It will be worth while to ask the same questions of the same person about the same work of art, on more than one occasion, to reveal possible changes of attitude: sudden aversion or satiety; gradually increasing interest in form, and so on. These should be correlated, if possible, with other changes in physical, mental or emotional condition, basic or transitory, which may help to explain them.

Words as Data for Psychology

In regard to the description of form, we have already noticed the importance of studying the use of specific critical terms: to what objects and parts of objects each has been applied by critics old and modern, and with what general connotations. For purposes of psychology, it will be relevant to carry the investigation farther. Each critical term, we have seen, is an attempt to name and characterize a "tertiary quality"; an affective, conative or evaluative response which may be projected on the object and felt as a part of it. In the description of form, we were interested largely in those

factors in the object which helped determine the nature of the response; here we are interested in those other coöperating causes which lie in the make-up of the individual.

Starting with the fact that a certain person has applied to a certain object the word "sublime," "graceful," "awkward," "dull," or some other critical epithet, it becomes our problem to try to penetrate behind that word to the mental mechanisms that helped call it forth. In a single case, it may be impossible to infer such causation; but through applying the principles of induction to a large number of cases, we may strengthen a hypothesis. In regard to the alleged obscenity of a certain book or statue, we are apt to ask something about the people who call it so. Are they mostly persons who by other statements or manifestations have shown themselves extremely Puritanical, repressed or ascetic? What of the persons who deny its obscenity? Are they of the other extreme, or are they an average sampling of fairly respectable human beings? Such correlated facts are regarded in everyday thinking as possible clews to the psychic factors involved in criticism.

To make inference of this sort at all reliable, it has to be based not only on many cases, but on many details about each, so as to guard against overlooking unsuspected contributing factors. For that reason, research should include a variety of facts about each critic, even some that seem to have no obvious bearing; as more and more data accumulate, significant correlations may appear. In regard to each writer whose judgment on a work of art is noted, and each person who answers the experimenter's questions, a variety of biographical facts should be noted, as in the study of creativeness: age, education, special training in art, normality of sense-organs, main interests and habits, and the like. A painfully methodical grubbing of details, it may seem; but all inductive science is based upon them.

Along this line we may hope eventually to throw some light on the crucial issue of differences in level of taste. In regard to a given object or type of form, what are the expressed responses of the persons who claim to be expert connoisseurs, and how much agreement is there between them? What of the academically trained artists, and of the radical modernists? Of persons of general or scientific cul-

ture, but untrained in art? Of uneducated persons with high intelligence quotients? Of children at various ages? Are there notable sex differences in response to some types of art? Are there certain expressed responses to a given case or type which seem to be universal or nearly so, and may be due to basic human traits? Are there others peculiar to certain types of character and training? Still others which are due to rare personal idiosyncrasies? Are the simple perceptive responses the most uniform? How do the affective, associative, conative, motor, ratiocinative and evaluative responses compare with each other as groups, in respect to a tendency to vary in individual cases? Within each group, which responses are the commonest and which the rarest? A judicious use of statistical methods is of course necessary in this sort of research.

By comparing these data with those acquired on creativeness, one could approach such traditional problems as the extent to which appreciation tends to repeat the artist's process of creation, and what the essential differences are.

Data should also be classified with reference to words commonly used in criticism. With regard to each, the psychologist should list not only its chief definitions and the objects to which it is applied (as suggested in the previous chapter) but also whatever can be inferred from contexts about the motivation behind its use. This would include the apparent emotional attitudes, as of strong like or dislike, admiration or indignation, and whatever explicit judgments of value it is intended to convey.

There is no reason why the same mode of approach should not be extended to an investigation of experience outside the world of art, yet similar in nature. The common idea that "criticism" can be directed only toward art and not toward nature is misleading. A natural scene can be appraised in terms of its form in exactly the same way that a painted picture is appraised; the song of birds is surely a kind of music, and some conversation is literature. If there are frequent differences, as in origin, degree of selectiveness and unity, it is important to recognize them; but one should hesitate before assuming any radical difference in kind between objects of art and nature as forms, or between our ways of responding to them. We can admire a picture disinterestedly, or with a

strong desire to own it; likewise a natural scene. The terms used in art criticism are practically all applied to things, persons, events and qualities in daily life; and so, as far as present evidence indicates, are all the possible modes of psychic response to art.

One way to approach the vexed questions of the relation between art and nature, æsthetic and other types of experience, æsthetics and ethics, is through observing the wider applications of critical words. Study of the functioning of a given term in art criticism could well be extended, in important cases, to a study of its applications to objects other than art. General psychology could profit considerably from more detailed knowledge of typical complex affective and conative responses, habits and configurations. These are hard to experiment with or observe directly, but poetry, drama and fiction are full of attempts to express and describe them distinctly. Literature is rich in yet uninterpreted data for the psychologist.

He can examine it for verbal expressions of each principal emotion and sentiment, and for finer shades of mixed, vague or conflicting feelings; for words expressing the feeling-tone of direct perceptions, and for those more expressive of association, comparison, desire, regret and reasoned valuation. He can give special attention to the names for affective qualities of the "lower" sense reactions, such as "aromatic," "pungent," "bitter," "zestful," "piquant," "cloying," "tingling" and "soothing," and for simple affects of the higher senses, such as "dazzling," "somber," "luminous," "shrill," "raucous" and "mellifluous." By noticing the stimuli to which each word is applied, and the accompanying conditions and expressed attitudes, he can approach a comparison with the effects of similar stimuli embodied in works of art, as to relative intensity, poignancy, and the cumulative power of organized form. Such literary data could be correlated with experiment on the comparative nature of the lower and higher senses, as to their tendency to rapid satiety and anæsthesia, their power to suggest definite associated images and emotions, and their degree of capacity for being organized into forms and contrasting sequences. Individual differences, such as the tendency to visual or auditory imagination, or to special bonds between the senses like color-

hearing and tone-vision, could also be studied through a combination of fresh experiment and the analysis of literature.

In carrying the study of critical terms to those applied to persons and modes of conduct, such as "noble," "wicked," "amiable," "seductive," "domineering," "furtive," "antagonistic," and the like, we should be coördinating data for both æsthetics and ethics. The latter field also could profit much by detailed psychological study of the complex variety of human relations.

CHAPTER IV

VALUATION AND VALUE-STANDARDS

The Need of Descriptive Study

It is still a current practice to distinguish æsthetics and ethics as "normative" sciences, dealing with "values," from "descriptive" sciences, dealing with "facts." This antithesis obviously suggests (whether or not it is always so intended) that values are not facts, but some strange sort of entities apart from the natural order of things. It suggests, further, that no descriptive study of moral or æsthetic phenomena is needed or possible; and that norms or standards can be laid down without prior observation of the activities they are intended to regulate. All of these implications are untenable on the basis of a naturalistic philosophy.

Most discussion of value from a naturalistic viewpoint has been highly general and abstract: concerned with maintaining the relativity of standards as opposed to absolutism; with defining various broad categories, such as intrinsic and instrumental values, and with debating the general epistemological and psychological nature of values and valuation. The discussion of concrete particulars, especially by art critics, has too often been with naïve and dogmatic assumptions, and without relation to contemporary movements in philosophy and psychology.

It must be granted, of course, that values are at least a rather peculiar and mysterious kind of facts, not easy to observe or describe with confidence. But, as the previous chapters have tried to show, there are many phenomena related to æsthetic value which can be studied in a more descriptive spirit than they have been in the past. In regard to the process of valuation itself, æsthetics can at least try to observe in more detail how actual difficulties are met and dealt with in making choices and appraisals of works of art. These difficulties will probably not often be felt or stated in the technical terms of the value-theorist. He may not recog-

nize some of them as having much to do with his classical problems of "fundamental value." But some attention to them will at least throw light on issues of practical importance, and possibly on the deeper theoretical ones as well. He may be able, also, to help restate confused critical controversies in clearer psychological terms, and to suggest intelligent ways of proceeding with them.

Enjoying and Criticizing

One fact that must appear to any careful observer is the great variety of difficulties encountered. Their differences are commonly ignored in theory, and all are indicated by some such vague expression as "the problem of appreciation" or "the problem of æsthetic value."

First of all, it should be clearly recognized that some experiences of art involve no felt difficulty at all. A person can listen to a piece of music as he would drink a glass of wine or breathe the air of a spring morning, with no effort, problem or reasoning of any sort. One may be simply sensing the object casually, or perceiving it fully but unemotionally, or perceiving it with emotion, or giving partial attention to it and dreaming of something else. One may be enjoying it, suffering or being bored. One may habitually prize or cherish a thing as a much-loved possession, and yet feel no call to appraise, criticize or otherwise reason about it.

In other cases there may be a felt difficulty in perceiving clearly, especially where the object is complex or unfamiliar. How this sort of difficulty can be dealt with we have considered in the chapter on form; it does not involve, necessarily, any element of conscious appraisal or inference.

Other difficulties may arise in adjusting the still more complex responses accompanying perception. We may wonder what a certain painted form represents, and gradually recognize its meaning through comparison with remembered images of similar objects. We may feel a conflict in emotional response: if, for example, the music of a song affects us in one way, the words in another. As noted above, such a conflict may not be soluble, if due to the nature of the form; or we may adjust it by perceiving a higher unity if one exists; or by trying to ignore the words and listen only to the music.

We may feel a conflict between the present direct experi-

ence and a remembered or imagined one. For example, at one concert, or in looking at a picture we have bought, we may wonder if we should have enjoyed another one more. Such a difficulty may involve no rational appraisal: it may be adjusted simply by trying to imagine the alternative in question more vividly, until one or the other is able to call out a response of decisive intensity. If some particular image is habitually brought to mind and compared with present objects, it is sometimes called an ideal or standard of value. Thus in the mind of a doubtful lover, the image of some pictured beauty may help decide his present feelings. The memory of some Greek statue may help a modern sculptor to decide how to pose an arm, or a modern critic to decide whether he likes the new statue when it is finished. These difficulties may be brought to a level of conscious analysis and reasoning, or they may be settled simply by visualizing alternatives and letting the resultant impulses adjust themselves.

In the chapter on form we noted also the additional difficulties that arise in the use of words, and the possibility of an experimental attitude in verbal criticism.

Analyzing an Æsthetic Situation

Any but the most naïve of critics will realize that his feeling and criticism depend in part on his own personality. Any but the most dogmatic will desire in certain important cases to be especially fair and impartial; to guard against possible prejudice and other factors that might distort his judgment. If he is not interested in explicit judgments, he may at least be curious to understand more clearly the whole relationship between himself and the object: just how it affects him, and why in that particular way. "This Wagner opera," he may say, "is boresome and heavy to me, but some people enthuse over it. I am not going to be awed by authority and try to convince myself that I like it; but I would like to know what it is in myself, and what in the opera, that doesn't get along together."

Such a desire to understand a relationship would not be gratified by an intensive analysis of the form alone, or of one's own nature apart from the form. Attention might divide itself about evenly between self and object. It is un-

likely that in practice one would wish to carry either line of analysis into the amount of detail that we have considered in the last two chapters. There the interest was a scientific one, in working toward generalizations. Here we are considering a difficulty that is purely practical and local: a desire for light on the components of a particularly puzzling situation.

Any consequent reflection will be likely to go a little way toward form-analysis, and a little way toward self-analysis, without much, if any, attempt to distinguish between the two lines of inquiry. Is it the orchestra, the singing or the acting that bothers me most? The number of things to keep track of at once? The long drawn-out monologues? Am I perhaps listening in the wrong way, straining too hard to recognize each *leit-motiv*, or to understand every German word? Have I become so used to Italian opera that I listen for obvious tunes, and am disappointed not to hear them? Such questioning can go on until one strikes a reason or combination of reasons that seems adequate, or until one loses interest in the problem. If the importance of the case seemed to warrant it, one could go indefinitely far along both lines of analysis.

By far the greater part of our mental workings can not possibly be brought to consciousness by our own unaided efforts, as psychoanalysis has abundantly demonstrated. Fundamentally, one's response to a work of art as to anything else is determined by the long history of habit-formation stretching back into infancy, whose cumulative steps can not be consciously remembered. One's most intense fascinations and repulsions may be caused by some long-forgotten shock, or the habitual repression of a strong tendency. Many of the customary standards of one's social group, moreover, are so much taken for granted as to be unconscious, and not recognizable as distinct factors in motivation. But to some extent it is possible for any one to bring into consciousness motives which are near its threshold, especially by reading about or observing such motives in others, or noticing marked differences between their preferences and his.

It is usually not difficult to recognize major peculiarities in one's physical condition, which may affect æsthetic responses. These may be basic, like color-blindness or tone-

deafness; or transitory, like a headache or the fatigue and satiety caused by overstimulation of one set of nerves. A person who has heard a brass band practising in the next room all day would do well to take the fact into account if he has to hear and criticize a band concert that evening.

Granted a genuine desire for intellectual honesty, it is sometimes possible to make oneself admit that one's valuation of a work of art has been influenced by extraneous associations. The artist, or some one who has praised or attacked his work, may be a friend or relative, or an enemy. Some pleasant or unpleasant experience may have happened to one in connection with the present object, with a similar one, or even with something suggesting a detail in this one. Oftentimes a vague but strong emotion toward an object is due to such a memory, halfway or altogether buried: a dance-tune, a perfume, a pictured garment will convey some poignant but unidentifiable association. A strong dislike for a color or pattern may be due to the fact that it was in the wall-paper of a sick-room during an illness long ago. Sometimes these associations can be recaptured by effort, and sometimes not; but they can at least be recognized as factors in one's own personality, and not in the work of art one is criticizing.

By frank self-analysis one can also, at times, come face to face with some other unrealized cause of an æsthetic judgment. Perhaps it is due to a desire to win approval through showing one's up-to-date tastes; through appearing erudite, radical or conservative. Perhaps it is due to an excessive respect for some authority on the subject, whose positive attitude is making one repress a feeling inconsistent with it. Perhaps one has publicly expressed a strong opinion about an artist, in a way identifying oneself with that attitude, and hesitates to admit a change of mind. One's judgment has perhaps been a perfunctory deduction from some supposed law or standard of good art, rather than an expression of one's actual feelings. Some associated belief or bit of knowledge is perhaps being confused with the direct appeal of the object as it stands—that the work is by a famous artist; has had a romantic history; was a great step in advance for its time; was much influenced by some other work; is said to have been retouched or copied. All these points

may be relevant to a comprehensive account or valuation of the object; but it is confusion of thinking to mistake them for directly perceivable qualities of form. A good way to clarify a situation of this sort is to ask oneself whether one's feeling and judgment would be affected by incontrovertible proof that the object is of a much later (or earlier) date than it is supposed to be. As a general practice, one can guard against the confusion by criticizing works of art without knowing the name or date of the artist: by listening to music before consulting the program; by judging pictures before looking at the labels underneath.

Still another variety of confusion in direct criticism arises from introducing speculations in regard to the object's future and indirect effects. What effect would it have on a person to keep on exposing himself to this sort of art? Would it improve his morals or his general culture? Is this a rather trivial, ephemeral piece of work (such as a popular tune, an amusing short story or a bit of journalistic cleverness) of which one would grow tired if forced to hear or read it many times? Once more, these are important questions in themselves. But clarity of thinking would consist in considering them as fairly distinct from an estimate of the object's present direct appeal; confusion would consist in mistaking answers to them for the direct response and criticism.

These suggestions for self-examination are not given with the implication that all art criticism should be so careful and analytic. Quick snap-judgments on scanty evidence, with no consciousness of self, are the life of practical enterprise in art criticism as elsewhere. It is not implied, furthermore, that if one discovers a certain peculiar motivation or dubious inference behind a judgment, that judgment should forthwith be altered. Certain peculiar preferences, certain habits, faiths and assumptions, strong emotional associations, one may accept as integral parts of one's character. Their dictates in æsthetic judgment will then be upheld even when consciously recognized. Every one has such peculiarities; there is no such thing as a completely objective valuation of a work of art.

But from a practical standpoint, a desire for greater care in appraising immediate values may be achieved through a combination of form-analysis and self-analysis. The for-

mer can help the individual to be more confident that he is judging the work of art itself as a whole, and not some fragment of it, or some associated fancy. The latter can help him to be more confident that his response represents the more basic and permanent elements in his character, and not merely a transitory mood or caprice, or a single mistaken inference. By comparing his judgment with those of others, he can further discover the extent to which it is in accord with the consensus of social experience. If he then still reaffirms his first judgment, it will be a more conscious and tested one, and less a product of blind impulse.

Predicting Future Æsthetic Values

If one is considering the purchase of a picture, the essential felt difficulty is likely to be, not "How do I like it at this moment?", but "How will I like it month after month, on a wall in my home?" If one has just heard a piano composition played, and is wondering whether to learn it, the question will be, "Is it of sufficient lasting value to justify the effort it will take?" These questions need not bring in any outside, non-æsthetic considerations, like the effect on one's professional career. They may require simply the foreseeing of a whole series of direct æsthetic situations more or less like the present one; of whether the object is going to "wear well," to gain or lose in appeal through repeated experience.

Such a question can be answered only in the light of past experience with similar objects. I (or some one else whose tastes I believe similar to mine) have had fairly extended contacts with this sort of art, and have found that it "grows on one"; or, on the contrary, that it becomes rapidly tiresome.

A person's ability to predict his own future responses will increase about in proportion as he has made more careful study of various forms and of his own past responses to each. Then a newly presented work will be swiftly recognized as belonging to a certain form-type, or as a combination of several types. This recalls the responses made to such types, and he predicts accordingly for the present case. In a simple way, this mental process occurs whenever we select a dinner from a restaurant bill of fare. Any generalization, conscious or unconscious, about the tendency of a certain form-type

to produce a certain effect, can operate as a standard of value. One can act in accordance with it even if one's present feelings are no help in deciding. A person fatigued from visiting many picture-shops, to the point where he enjoyed nothing, might still be able to recognize that at last he had found a picture of the type he had always liked; and thus predict what his feelings would be when rested.

The obvious danger here, as usual, is habit-fixation. No one but a person of extremely narrow, set habits could predict with any approach to certainty his future responses to all sorts of art. But, on the other hand, no one has time to keep experimenting with all possibilities indefinitely. The middle course is to hold fast to that which one has found best, and give most attention to it, while always moderately receptive to unrealized possibilities in other things.

To those unrealized possibilities the experience of others is an ever-suggestive guide. One can be independent to a common-sense degree, accepting no current standards and nobody's judgment as final, and yet devote a little extra effort to the things which are praised by people one respects. The acquirement of tastes by effort, from the proverbial olives to Matisse and Stravinsky, is a necessary phase of æsthetic growth. It is usually guided, if not by popular standards, at least by the praise of critics and particular groups, radical or conservative, with whom one feels in accord. That accordance is itself a thing which can be accepted blindly, or tested through repeated comparison of judgments.

When no such mutual understanding exists, caution and independence in using a recommendation from some one else would show itself in a demand for more objective details to support the recommendation. An undiscriminating person will simply ask a librarian for "a good story," or accept a ticket agency's prediction "you'll enjoy this play." A discriminating reader is likely to pay more heed to a review containing some descriptive analysis, than to one which gives only broad appraisals or accounts of what the reviewer thinks and feels about the book in question. With a fairly objective summary of the book in hand, the reader can predict on the basis of his past experience whether he would be likely to find it worth while reading, and in just what way. If he then reads the book, and is consistently experimental, he will

be open to unexpected effects from it, and ready to alter his general standards accordingly.

These general standards may remain in his mind purely relative to himself, with no claim for universal validity. They are generalizations on how certain kinds of art have in the past affected him. Kept tentative and flexible, they will not mechanize his choices. Together with suggestions from other persons, they can be the means of saving the time and trouble which excessive, indiscriminate experimentation with every presented alternative would cost, and of guiding him directly to the most promising possibilities.

Non-Æsthetic Values of Art

Situations often arise where the important thing to be decided about a work of art is not its direct æsthetic effect, present or future, but its effects along other lines. For example, in time of war persons in authority may be interested in having music written that will stimulate a martial spirit in soldiers; in having posters designed that will encourage patriotism and enlistment; in suppressing literature that will cause friendliness toward a hostile country. In primitive times, masks and helmets were designed to frighten the enemy.

It is a familiar fact that religious motives, also, have entered into the creation and appraisal of art. Much interest in form for its own sake has no doubt gone into the making of religious art, but at the same time an effort has been made to have the architecture, the stained glass, robes, incense and music such as would conduce to a mood of piety and worship. The moral consequences of art, too, have been of vital interest: whether the moral effect aimed at is one of harmony and proportion in living, or of rigid asceticism, the desire to censor art not conducive to it is perennial.

A hospital wants music and decorations that will soothe a nervous patient, and cheer the depressed. A social climber wants paintings and furnishings that will advance his prestige. An educator wants art-study so organized as to contribute interest to other subjects: to represent literary characters and dramatize history. A social philosopher is impressed by the power of art to cross national boundaries and integrate social groups.

This miscellaneous list is enough to indicate the variety of

ways of appraising art on grounds other than its direct æsthetic appeal through the experience of form. It suggests the inadequacy of the common antithesis between "art for art's sake" and "art for its moral consequences." Many of the above interests could not be classified as moral consequences, in any precise meaning of the term. The other antitheses between intrinsic and instrumental, immediate and contributory values, are also rather too simple to cover the ground. In time and space, a religious or martial effect may be as "immediate" as the enjoyment of form. We have just observed, moreover, how a work of art can be appraised as an instrument to future æsthetic effects over a long duration of time. Even the word "æsthetic" or "appreciative" covers a multitude of different ways of experiencing art. If we adopt a broad definition of "æsthetic," as including any "consummatory" moment in experience, any work done for its own sake, it will take in many interests and activities other than the enjoying of artistic forms. However, a rough practical distinction can perhaps be drawn between those interests concerned more with direct perceptive and emotional responses to a form, and those concerned with other, more heterogeneous consequences, ramifying outward into activities not usually associated with art.

To trace the consequences of a type of art into these remoter fields would lead the æsthetician far beyond any limits which could reasonably be set for his subject. He would soon find himself involved in politics, theology, medicine, general education or some other subject, demanding a knowledge of its own distinctive conditions, ends and means. So broad a question as whether art should be appraised "for art's sake," or on some other ground, is itself a question not to be settled within æsthetics alone, since it involves the adjustment of many diverse social interests. The æsthetician will be rendering a sufficient service if he can throw some light on the ways in which art can be appraised for its own sake, and to that end he could afford to let still more complex questions alone for the present. By merely distinguishing these issues within the field of art criticism, where they are sadly confused, and showing how one line of thought can be followed up without dragging in irrelevant considerations, he will make it easier to deal with each of them in its turn.

Another contribution he can make to these broader problems is a set of clearer conceptions of various types of form. Then if a question arises about the effects of some kind of art in another field, the workers in that field will at least have a more definite notion of what they are to observe in action. When the question is now raised of the effect of "indecent" art on morality, everything from Greek statuary to the Bible and Shakespeare is usually brought into the controversy, with no impartial attempt at differentiating between an idealized representation of nudity, primitive frankness, sophisticated decadence, naturalism of the Zola type, erotic sentimentality, crude pornography, and the many other fairly distinguishable types, vaguely grouped together in the popular mind as "indecent." A first step toward intelligent thinking, if different kinds of art are involved, would be to consider their consequences separately, in addition to whatever common effects they may possibly have. The æsthetician could also render a service to public discussion by stressing the relativity of all effects in art to the personality of the appreciator. He could suggest that if any hypothetical generalizations are to be made, they should be with reference to specified age or other groups, and to the various possible ways of experiencing a given form.

Revising Social Standards

The movement called "relativism" in ethics and æsthetics is still to a large extent negative and destructive in emphasis. It is forced to devote the greater part of its energies to combating absolutism, the belief in fixed universal rules and standards of moral and artistic value. Through centuries of philosophical argument, supported by theology and by the natural human tendency to fixed habits and customs, the latter has become so deeply ingrained in theory and practice that it is not to be destroyed in a day. There will long be need of repeated attack upon its speciously impressive arguments, and for protest against its cramping influence in almost every field of thinking and conduct. Under these conditions relativistic theory has wisely emphasized the danger of deciding problems of valuation by appeal to any general standards, and has urged instead that each problem be dealt with afresh, in its own terms, by intelligent analysis

of the special conditions involved in it. With regard to æsthetic and moral theory, it has stressed the point that social conditions are too changeable, aims and interests too diverse, every situation too different from any other, to permit of general formulas for valuation.

As usually happens with a moderate view, relativism has been carried to extremes by certain writers. They have construed it as implying a complete anarchy and utter disparity of values, a Sophistic individualism which declares each case to be entirely unique and without precedent in the history of man. No individual's experience is like any other's; no æsthetic moment is comparable to any other; valuation is merely expressing how one feels toward a thing at a particular instant; no general principles can be of the slightest validity from one case to another.

Although it is hard to disprove such views in theory, no one would dream of trying to live up to them in practice, even their most ardent supporters. Life is too short to analyze and decide every problem from the ground up, and no sane person disregards entirely the testimony of past experience in art or other activities. As mentioned in a previous chapter, neither works of art, responses to them, individual tastes nor problems of appraisal are by any means unique; each is a little different from every other, but common factors recur. Upon this fact rests all continuity of individual action, and all possibility of communicating ideas and preferences. General standards of value are, and always must be, used by every one, as a means of bringing to bear the past experience of himself and others.

In so far as relativistic theory seems to ignore their necessity, and to disparage all use of them, it loses touch with facts and urges the impossible. It surrenders the field not only to blind impulse but to absolutism itself. The believers in absolutism have been active in working out principles which, though often excessively restrictive, and based on false premises, have had much accumulated wisdom in them, and have performed a useful service in coördinating creative and critical effort. Unless relativism can contribute some positive aid in the use of standards, people will go on employing the old methods *faute de mieux,* and rushing when expedient to the other extreme of admitting no standards at all.

Is there any way, consistent with a naturalistic philosophy, by which æsthetics can develop reliable standards of value? Certainly it can not be done in a spirit of coercion, through the attempt to establish any external rules as binding, through telling people that they ought to like what they do not, through ignoring the variability of conditions and interests in art. In a purely descriptive spirit, however, a line of research is open to æsthetics which can not fail to throw light upon the problem. Many of the necessary steps have been outlined in previous chapters; it remains to link them together with explicit reference to standards of value.

Recognizing at the start that human nature and conditions vary from time to time and person to person, it is possible for æsthetics to inquire, with reference to specific factors, how much they vary. Through systematic comparison of responses to identical forms and types of form, it can try to estimate in each case how much uniformity and how much diversity exists. It can further try to correlate the diversities with accompanying factors, such as age, environment, education, vocation, special training in art and the like. It can take note of what changes in response occur, and seek to correlate these changes with accompanying factors, such as the passage from childhood to adolescence and maturity, and the following of courses of training in the appreciation of art. By carrying such observations over extended periods, it can develop a new type of history: the history of the effects of certain works and types of art on persons who have experienced them; both the immediate effects and the long-run, cumulative effects. All this, it should be clear, involves no assumption whatever about what sorts of art are best, or best for any sort of person. It does not imply the assumption that the most popular art is the best, or that by taking a vote one can determine values; it does not attempt to reduce values to a common denominator.

It would aim at limited descriptive generalizations of the following order: that a certain kind of form tends to produce a certain kind of effect in persons of a certain kind under certain conditions. Obviously, any such estimates would have to be extremely modest and tentative. They would have to recognize the constant danger of oversimplifying through ignoring negative instances, and the diffi-

culty of discovering the specific nature of a response, by verbal or other means. At the start, they would have to be restricted to the persons and objects actually examined, without the presumption of their validity for others. But with increasing numbers of cases over longer periods of time, including diverse and unselected groups, and with a refinement of technique to guard against errors, correlations could be rendered increasingly reliable in this as in any other inductive research. Stronger and stronger presumptive evidence would develop of their holding for cases other than those actually examined.

If the work had to be done entirely by induction, it would indeed be a hopelessly intricate task to correlate four or more variables, each so complex and subtle in itself. But here again the deductive phase of scientific method can be brought into play. Æsthetic theory and art criticism are full of generalizations about the values of certain types of art. Instead of trying to build new ones from the ground up, the experimenter can devote most of his energy to testing those already formulated. Without presupposition as to their truth, he can observe how they actually work in guiding valuation: to what particular judgments, preferences, orders of merit, creative enterprises, approvals and disapprovals, they have led in the practice and theory of art.[1] The judgments and procedures thus deductively arrived at he can compare with the more spontaneous ones observed elsewhere.

Many current generalizations he will find stated in extremely sweeping and dogmatic form, as statements of the qualities an object must have to be beautiful, or as necessary rules of composition. Instead of throwing these aside as false, he will realize that each is probably a significant summary of the long experience of some group of persons. He will therefore pay careful attention to the qualities or methods specified, and try to find in each case to what consequences they lead, and what particular kind of value is attainable along those lines.

Standards expressed in general æsthetics are apt to be extremely vague when stated in the abstract. What are the particular consequences, one might ask, of saying that beauty of form consists in uniformity within multiplicity? Hardly any work of art ever made, good, bad or indifferent, is

excluded from such a formula. Even a natural object has some variety of parts, and some unifying principle that holds it together; otherwise we could not recognize it as a single object. By culling such formulas from æsthetic theory and arguing them in the abstract one gets nowhere. But look further in the discussion of each writer who employs them, and it will usually appear that he has something more definite in mind. By uniformity in multiplicity he means certain kinds of uniformity in multiplicity. He may or may not describe them definitely, but they will nevertheless appear from his particular illustrative appraisals. To Santayana this standard implies a specific judgment on the heroic couplet, on the Greek colonnade, and on Walt Whitman's poetry.[2] How vague and meaningless is Tolstoy's doctrine that art is to be judged by its moral effects, when that doctrine is detached from its context; how sharply significant as a tool of valuation when he goes on to arrange works of art in orders of merit according to it. It is for the æsthetician to note, summarize and compare such particular applications of each standard by each man who uses it.

Manuals of craftsmanship and composition in the arts are full of rules of procedure, somewhat narrower in scope and therefore easier to study as to their practical consequences. Academic books on harmony, for example, tell the music student that parallel fifths are wrong, and that a dominant chord must not be followed by a sub-dominant. The absolutistic mind accepts such rules as necessary principles of good art; the radical derides them as obsolete fetishes. An experimental course would be to ask just what peculiar effects parallel fifths tend to produce on the hearer. How do they sound when played alone on a piano? Rather flat and empty, perhaps. How do they sound when tried in this and that chord progression? How are they used by some moderns to fit into a general scheme, and what sort of atmosphere results? Are they perhaps good for certain effects, but incompatible with the effects aimed at by classical music?

In the same spirit one could study each rule of academic painting; about balance, good modelling, graceful arrangement of drapery and so on; each rule of conventional rhetoric about good sentence structure, plot and versification; each principle of good art laid down by every age and school.

What works of art and form-types does it tend to value most highly, what to condemn; what are the peculiar effects of each, and in what total aims may each be a coöperating or a frustrating part?

Practical conduct in the arts makes constant use of generalizations on the effects of certain types of art, both on the general public and on specified kinds of persons. These function as standards of value, in that a given case is identified as belonging to a certain type, and thereby judged as to its probable conduciveness to a special effect desired. Libraries have lists of boys' books and of girls' books, which work fairly well on the whole, although an exceptional child will reject the whole list, and although many children will occasionally want a different type of book. Orchestra directors know that an all-Beethoven program is for a certain kind of audience, and a program of light opera medleys and cornet solos for another. Book publishers and theatrical producers often make mistakes, but they make their living by predicting correctly on the whole. This applies not only to what the masses will like, but to what certain élite groups will like, and in what ways. In large cities plays are produced and pictures painted to appeal to small cultivated minorities: even the editor of a radical art magazine can guess what sort of illustrations, verse and criticism his readers will demand. Certain artists and works of art are known to have an almost universal, many-sided appeal to all groups and all artistic interests; others are associated with rare special types of personality and training.

It is for æsthetics to state clearly and further verify these hypotheses, and to analyze them into more definite correlations of formal and psychic factors. A necessary phase of this will be the analysis of such expressions as "good," "beautiful," "valuable," "like" and "dislike" into the countless different feelings and modes of valuation which they vaguely indicate. The result will be no single definition of "beauty" or standard of æsthetic value. Æsthetics inherits from Platonism an exaggerated respect for the importance of this and similar very broad and "fundamental" words. It is dissatisfied with any standard which is not couched as a brief absolute definition of beauty or goodness, for all persons at all times. No such standard can ever be workable

in practice, or in theory based on modern science. Æsthetics must abandon this ancient craving for a monistic solution if it is to function in a world increasingly conscious of the plurality and relativity of things.

The terms "good" and "beautiful" are less and less used in the criticism of art; as "true," their partner in the classical trinity, is vanishing from scientific discussion. They are used chiefly in casual conversation, as in remarking "What a beautiful day!" or in indicating a general attitude of approval or enjoyment when one is unable or indisposed to analyze the situation more exactly. Their breadth is that of vagueness, and they are too ambiguous to function effectively as tools for explaining phenomena or directing choice. Their continued use in æsthetics goes along with a tendency to oversimplify facts by reducing them to single concepts, and to substitute the thrills of word-magic for clarity of thinking.

In their place, and in that of all absolute standards and ultimate ends, will come more distinct hypotheses about the effects of certain types of form in direct appreciation, and in such remoter fields as it is found worth while to trace them. Such hypotheses will operate in valuation as tentative guides in predicting the probable effects of a case identified as belonging to the type specified.

What binding force, as a standard, would a generalization of this sort have on any individual who chose to differ from it? None whatever as a moral obligation, or as a sign that he was necessarily mistaken in judgment or inferior in taste. It would have no more coercive effect than a "law" of hygiene has in making individuals conform to it; rather much less, since the effects predicted would be vastly more contingent and uncertain. It will always be open to any individual to prove the generalization false, in his case at least; and if he succeeds the æsthetician must alter it accordingly. The more adventurous among artists will be likely to regard any such theory, as they now regard academic rules, as a challenge to do what has never been done before, with effects other than might have been expected. The adventurer in appreciation will regard it as a challenge to show that the potential effects of some kind of art have never been fully grasped or properly expressed. Such minds are the pioneers in æsthetic experience, as political reformers are in the art of government,

and it is the duty of theory not to dictate but to observe and explain their achievements.

To be most effective, however, experimentation must be with one thing or a few things at a time; not in all directions indiscriminately. Whatever past experience indicates as to certain fairly regular, dependable factors is taken for granted, temporarily at least, and used as a stable basis for trying new variations of other factors. Knowledge of traditional forms and techniques, and an intuitive grasp of their probable effects on the appreciator, have been of vital assistance to the most original artists. Whatever æsthetics can do toward making this knowledge more reliable and accessible can, if experimentally used, be an aid to original creation and criticism.

Control and Æsthetic Experience

That science aims at control of nature, including human nature, does not imply that it must also aim at universal mechanization. For insuring the necessities and comforts of life, large-scale mechanical production is an effective means, and science has therefore developed it. For attaining ideal values, radically different means may be necessary, and intelligent control will then consist in their discovery and application.

Æsthetics is not identical with the æsthetic experience which it studies, and it can aim at a scientific attitude without proposing that the latter should follow its example. Logical analysis and observation of the regularities in æsthetic experience are necessary to scientific understanding. But that is not to say that the creation and enjoyment of art should be more uniform, logical or analytic than in the past. If æsthetics discovers limits beyond which life cannot be made systematic without destroying elements of value within it, then intelligent control will consist in holding system within those limits, and in stimulating variety, surprise and unanalyzed feeling outside of them. As in government, the attaining of genuine freedom can be the chief aim of scientific planning. Control through applied æsthetics can aim, likewise, not at directing the courses of intuitive impulse, but at freeing it to seek its own paths of adventure and growth, by harmonizing unwanted conflicts, and dissolving the routines of mechanical habit.

NOTES

Chapter I

[1] *Cf.* Fechner, *Vorschule der Æsthetik;* C. Lalo, *L'esthétique expérimentale contemporaine;* C. W. Valentine, *The Experimental Psychology of Beauty.*

[2] Compare Dewey's conception of philosophy as generalized criticism (*Experience and Nature,* ch. X).

[3] See the critical writings of Paul Valéry, T. S. Eliot and Wyndham Lewis.

[4] Bosanquet, *A History of Æsthetic,* Preface.

Chapter II

[1] For fuller discussions of form in various arts, see Santayana, *The Sense of Beauty; Reason in Art;* Bosanquet, *Three Lectures on Æsthetics;* A. C. Barnes, *The Art in Painting;* De Witt H. Parker, *The Analysis of Art.*

[2] *Cf. Primitive Negro Sculpture,* by Paul Guillaume and Thomas Munro.

[3] See, for example, W. Worringer's suggestive analyses, with examples, of the primitive, classical, oriental, Gothic and Romanesque, in *Form Problems of the Gothic.*

[4] See Ogden and Richards, *The Meaning of Meaning,* for a discussion of the general subject of words.

[5] Ogden, Richards and Wood have listed sixteen different meanings of "beauty" in *The Foundations of Æsthetics.*

[6] Notably Leo Stein, *The A-B-C of Æsthetics.*

[7] *Vision and Design,* p. 207*f.*

[8] *Transformations,* p. 1. Compare Dewey, *Experience and Nature,* p. 35: the empirical method "places before others a map of the road that has been traveled; they may accordingly, if they will, retravel the road to inspect the landscape for themselves. Thus the findings of one may be rectified and extended by the findings of others," procuring (in philosophy) "that coöperative tendency toward consensus which marks inquiry in the natural sciences."

Chapter III

[1] "We attribute to outer things our own feeling of force, our own feeling of striving or willing, our own activity or passivity." This theory of Lipps has been emphasized by Vernon Lee (in *The Beautiful*) and by H. S. Langfeld (in *The Æsthetic Attitude*).

[2] *Cf. Music, a Science and an Art,* by John Redfield.

[3] See William James, *Pragmatism;* John Dewey, *Essays in Experimental Logic; Experience and Nature.*

[4] *Cf.* R. Pintner, *Æsthetic Appreciation of Pictures by Children* (*Pedagogical Seminary,* 1918, pp. 216-218); see also studies listed in the *Psychological Bulletin,* 1920, p. 331. C. E. Seashore's work in testing musical ability is of especial importance. (*Cf. The Psychology of Musical Talent.*)

[5] Noteworthy studies in various arts are Freud, *Leonardo da Vinci; Totem and Taboo;* Jung, *Psychology of the Unconscious;* Kempf, *Psychopathology;* Prescott, *Poetry and Dreams;* Krutch, *Edgar Allan Poe;* Tansley, *The New Psychology;* Hinkle, *The Recreating of the Individual;* Baudouin, *Psychoanalysis and Æsthetics; Le symbole chez Verhæren.*

[6] *Philosophy,* especially ch. XVI, *Self-observation.*

[7] *Cf. The Behavior of Museum Visitors,* by E. S. Robinson.

[8] *E.g., The Psychology of a Musical Prodigy,* by G. Revesz.

[9] *E.g.,* J. L. Lowes, *The Road to Xanadu* (on Coleridge).

[10] For a fuller presentation of this method, see *A Constructive Program for Teaching Art; Franz Cizek and the Free Expression Method; The Art Academies and Modern Education,* by the author, in the *Journal of the Barnes Foundation* for April and October, 1925, and April, 1926.

[11] *The Limitations of Experimental Æsthetics* (*Psyche,* 1925, p. 226).

[12] *The Foundations of Æsthetics,* p. 75. See also I. A. Richards, *Principles of Literary Criticism.* Other psychological theories of appreciation may be found in E. D. Puffer's *The Psychology of Beauty;* De Witt H. Parker's *Principles of Æsthetics,* and Laurence Buermeyer's *The Æsthetic Experience.*

[13] *Cf. The Effects of Music,* edited by Max Schoen.

Chapter IV

[1] For a presentation of this method from an ethical viewpoint, see *The Verification of Standards of Value*, by the author, in *The Journal of Philosophy*, May, 1922.

[2] *The Sense of Beauty*, p. 108*f*.

THE END

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